

Product data sheet

Specifications



Motor circuit breaker, TeSys Deca, 3P, 0.63 to 1A, thermal magnetic, spring terminals

GV2ME053

Main

Range	TeSys Deca
Product name	TeSys GV2
Product or component type	Motor circuit breaker
Device short name	GV2ME
Device application	Motor protection
Trip unit technology	Thermal-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	0.25 kW at 400/415 V AC 50/60 Hz 0.37 kW at 400/415 V AC 50/60 Hz 0.37 kW at 500 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 60947-2 100 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	Push-button
[In] rated current	1 A
Thermal protection adjustment range	0.63...1 A conforming to IEC 60947-2
Magnetic tripping current	15.1 A
[Ith] conventional free air thermal current	1 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
Phase failure sensitivity	Yes conforming to IEC 60947-4-1
Suitability for isolation	Yes conforming to IEC 60947-1

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

Power dissipation per pole	2.5 W
Mechanical durability	100000 cycles
Electrical durability	100000 cycles for AC-3 at 415 V In 100000 cycles for AC-3e at 415 V In
Rated duty	Uninterrupted conforming to IEC 60947-4-1
Connections - terminals	Power circuit: spring terminals 2 cable(s) 1...6 mm²solid Power circuit: spring terminals 2 cable(s) 1.5...4 mm²flexible without cable end Power circuit: spring terminals 2 cable(s) 1...4 mm²flexible with cable end
Fixing mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with adaptor plate)
Mounting position	Horizontal Vertical
Width	45 mm
Height	101 mm
Depth	78.5 mm
Net weight	0.28 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 IEC/EN 60335-2-40:Annex JJ IEC/EN 60335-1:Clause 30.2
Product certifications	CCC UL CSA EAC ATEX LROS (Lloyds register of shipping) BV RINA DNV-GL UKCA
IK degree of protection	IK04
IP degree of protection	IP20 conforming to IEC 60529
Climatic withstand	conforming to IACS E10
Ambient air temperature for storage	-40...80 °C
Fire resistance	960 °C conforming to IEC 60695-2-11
Ambient air temperature for operation	-20...60 °C
Mechanical robustness	Shocks: 30 Gn for 11 ms Vibrations: 5 Gn, 5...150 Hz
Operating altitude	<= 2000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.5 cm
Package 1 Width	11.2 cm
Package 1 Length	8.5 cm

Package 1 Weight	260.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	5.535 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	
Total lifecycle Carbon footprint	43

Use Better

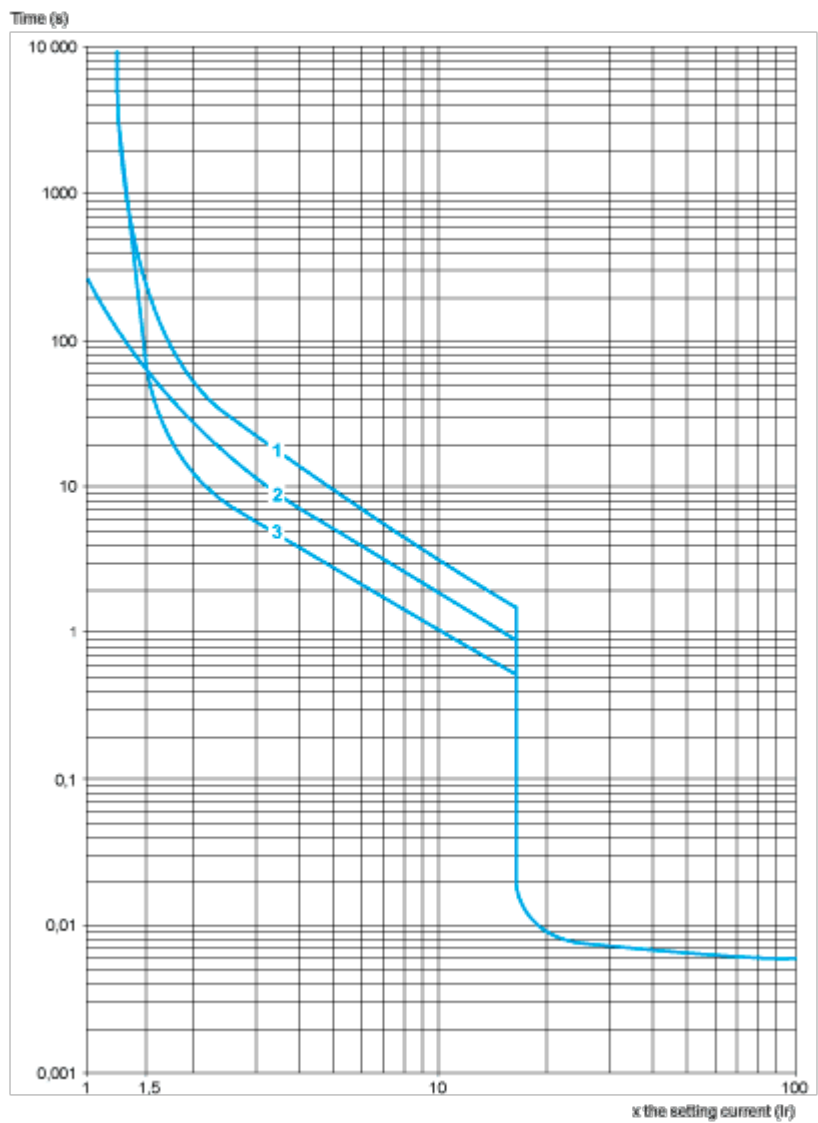
Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant with Exemptions
SCIP Number	04104e70-ba29-493c-b2cc-b5837d1f879b
REACH Regulation	REACH Declaration
California proposition 65	WARNING: This product can expose you 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	
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

Thermal-Magnetic Tripping Curves for GV2ME and GV2P
Average Operating Times at 20 °C Related to Multiples of the Setting Current

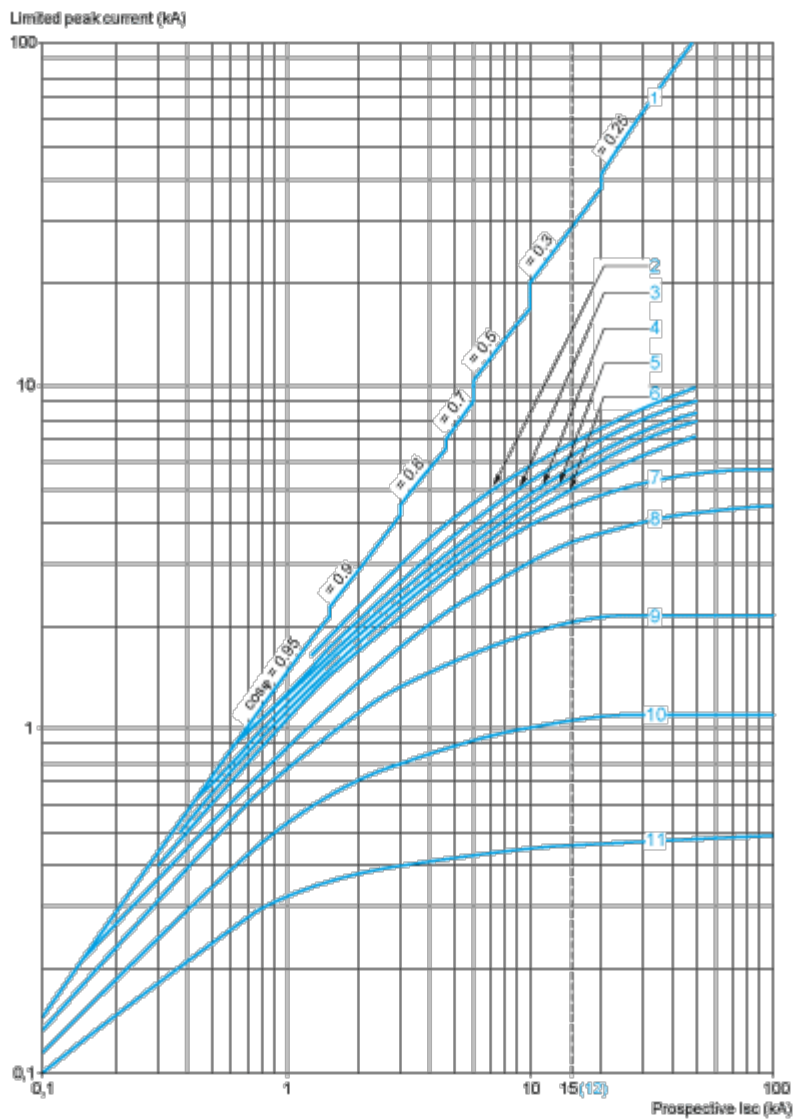


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

Current Limitation on Short-Circuit for GV2ME and GV2P (3-Phase 400/415 V)

Dynamic Stress

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

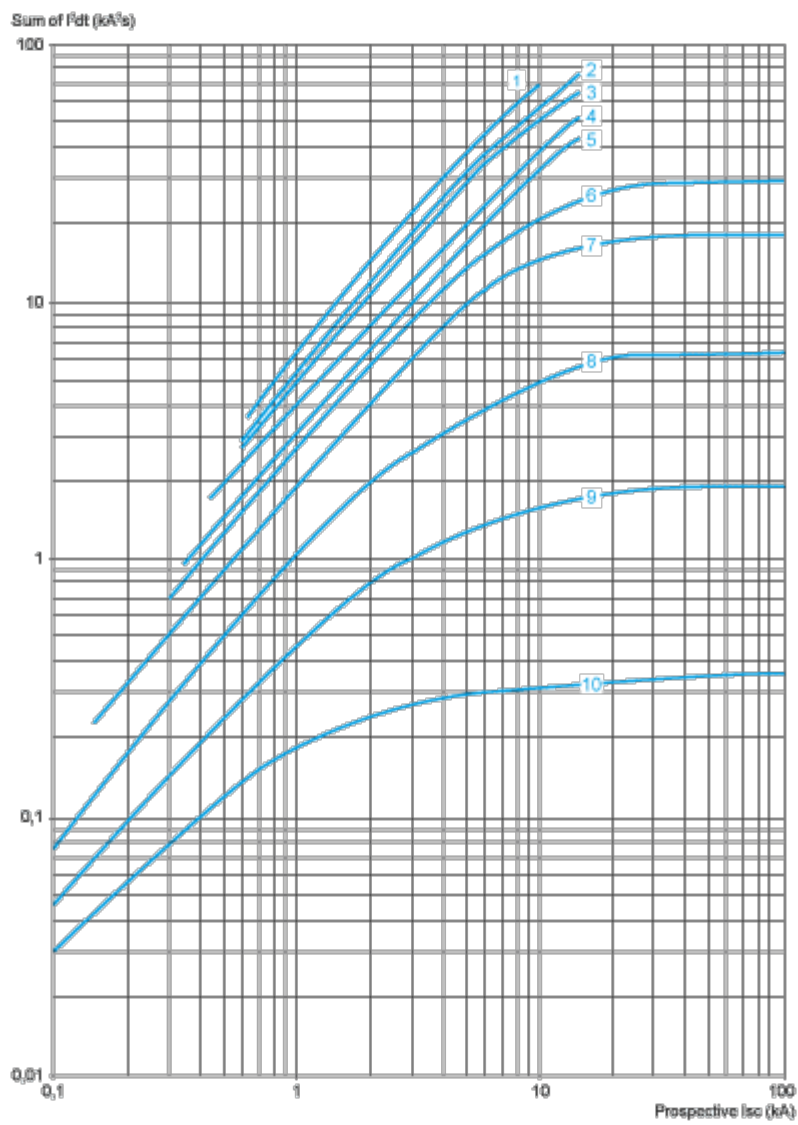


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

Thermal Limit on Short-Circuit for GV2ME

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

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

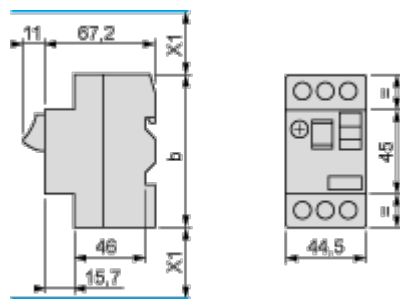


- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
- 7 4-6.3 A
- 8 2.5-4 A
- 9 1.6-2.5 A
- 10 1-1.6 A

Dimensions Drawings

Dimension

GV2ME



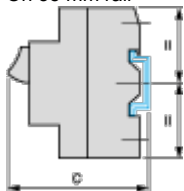
- (1) Maximum
- X1 Electrical clearance = 40 mm for $U_e \leq 690\text{ V}$

	b
GV2ME●●	89
GV2ME●●3	101

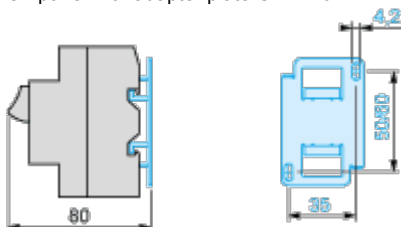
Mounting

GV2ME

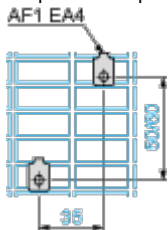
On 35 mm rail



- c = 78.5 on AM1 DP200 (35 x 7.5)
- c = 86 on AM1 DE200, ED200 (35 x 15)
- On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA

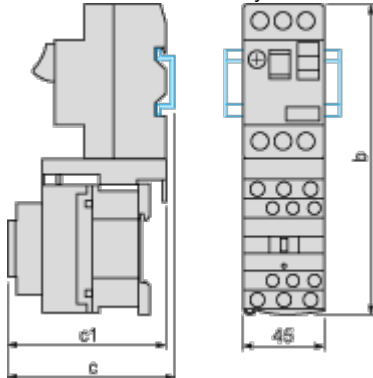


On rails DZ5 MB201

GV2ME053

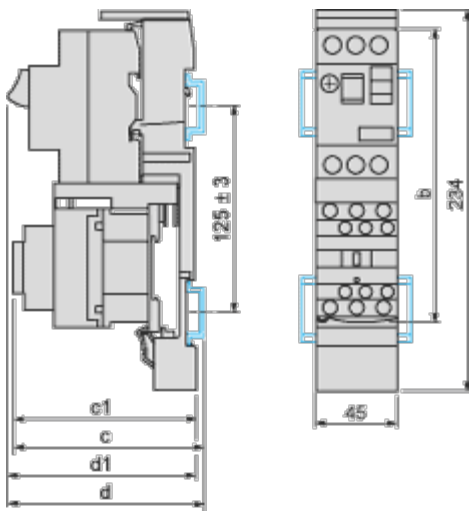


Combination GV2ME + TeSys d contactor



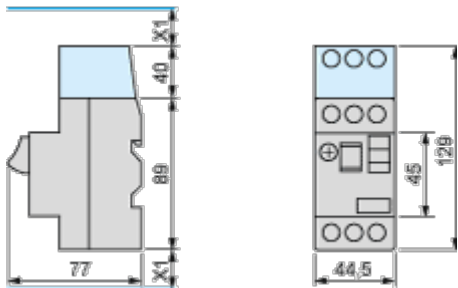
GV2ME +	LC1D09...D18	LC1D25 and D32
b	176.4	186.8
c1	94.1	100.4
c	99.6	105.9

Combination GV2ME + TeSys d contactor



GV2ME +	LC1D09...D18	LC1D25 and D32
b	176.4	186.8
c1	103.1	136.4
c	135.6	141.9
d1	107	107
d	112.5	112.5

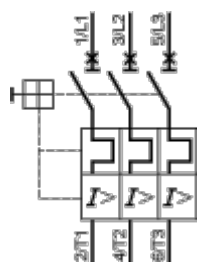
GV2ME + GV1L3 (Current Limiter)



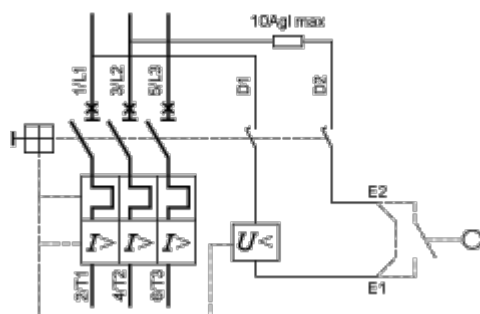
X1 = 10 mm for Ue = 230 V or 30 mm for 230 V < Ue ≤ 690 V

Connections and Schema

GV2ME•• and GV2RT



Connection of Undervoltage Trip for Dangerous Machines (Conforming to INRS) on GV2ME Only



Offer Marketing Illustration

Product benefits / Features



TeSys Deca Motor Circuit Breakers

Range Accessories



Energy Sensor



Mounting and adapters



Terminal block



Combination block



Motor starter
adapter plate



Current limiter



Comb busbar



Auxiliary
contact blocks

Offer Marketing Illustration

Product benefits / Features



The image shows a TeSys Deca Motor Circuit Breaker, a black rectangular device with a red handle. It has three screw terminals at the top labeled 1, 2, and 3, and three at the bottom labeled 2, 4, and 6. The front panel features a red handle with 'ON' and 'OFF' positions, a 'RESET' button, and a 'STOP' button. A small display shows '1.6 20A'. A QR code is visible on the bottom left of the front panel. The Schneider logo is at the bottom right of the front panel.

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.



Image of product / Alternate images

Alternative

