

Product datasheet

Specifications



Motor circuit breaker, TeSys GV2, TeSys Deca, 3P, 13 to 18A, thermal magnetic, screw clamp terminals, button control

GV2ME20

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	7.5 kW at 400/415 V AC 50/60 Hz 9 kW at 500 V AC 50/60 Hz 15 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 15 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 8 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 6 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 50 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 75 % 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	Push-button
[In] rated current	18 A
Thermal protection adjustment range	13...18 A conforming to IEC 60947-2
Magnetic tripping current	341 A
[Ith] conventional free air thermal current	18 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: screw clamp terminal 2 cable(s) 1...6 mm²solid Power circuit: screw clamp terminal 2 cable(s) 1.5...6 mm²flexible without cable end Power circuit: screw clamp terminal 2 cable(s) 1...4 mm²flexible with cable end
Tightening torque	1.7 N.m - on screw clamp terminal
Fixing mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with adaptor plate)
Mounting position	Horizontal Vertical
Width	45 mm
Height	89 mm
Depth	78.5 mm
Net weight	0.26 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	9.300 cm
Package 1 Width	4.800 cm

Package 1 Length	8.500 cm
Package 1 Weight	282.900 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.142 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	124.452 kg

Contractual warranty

Warranty (in months)	18
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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
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	
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 kA²s in the Magnetic Operating Zone
Sum of I²dt = 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 $U_e \leq 690$ V

	b
GV2ME●●	89
GV2ME●●3	101

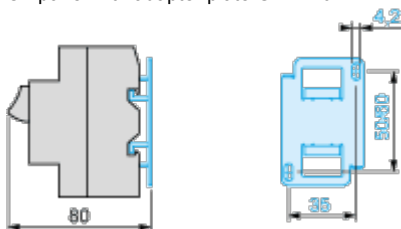
Mounting

GV2ME

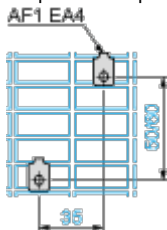
On 35 mm rail



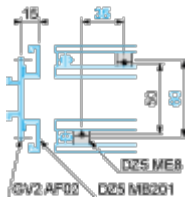
c = 78.5 on AM1 DP200 (35 x 7.5)
c = 86 on AM1 DE200, ED200 (35 x 15)
On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA



On rails DZ5 MB201



GV2AF01

Combination GV2ME + TeSys k contactor



GV2AF3

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

GV2AF4 + LAD311

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



Technical Illustration

Wiring diagram



REFER TO TECHNICAL DRAWINGS AND DOCUMENTATION FOR COMPLETE INFORMATION.

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.



Offer Marketing Illustration

Product benefits / Features

TeSys Deca

Motor Circuit Breakers



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Product benefits / Features



TeSys Deca Motor Circuit Breakers

Range Accessories



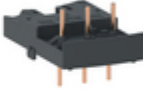
Energy Sensor



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 and a green indicator. It has screw terminals at the top and bottom, and a digital display on the front. 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.
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Image of product / Alternate images

Alternative

