

# Product datasheet

Specifications



## TeSys GV2-Circuit breaker- thermal-magnetic - 13...18 A - screw clamp terminals

GV2ME20

### Main

Range	TeSys Deca
Product Name	TeSys GV2 TeSys Deca
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 60947-4-1
Fixing Mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with adaptor plate)
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 60947-4-1
Magnetic Tripping Current	223 A
[Ith] Conventional Free Air Thermal Current	18 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
[Uimp] Rated Impulse Withstand Voltage	6 kV conforming to IEC 60947-2

<b>Phase Failure Sensitivity</b>	Yes conforming to IEC 60947-4-1
<b>Suitability For Isolation</b>	Yes conforming to IEC 60947-1 § 7-1-6
<b>Power Dissipation Per Pole</b>	2.5 W
<b>Mechanical Durability</b>	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>	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>	0.26 kg
<b>Colour</b>	Dark grey

## Environment

<b>Standards</b>	EN/IEC 60947-2 EN/IEC 60947-4-1
<b>Product Certifications</b>	CCC UL CSA EAC ATEX LROS (Lloyds register of shipping) BV RINA DNV-GL UKCA
<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>	9.300 cm
<b>Package 1 Width</b>	4.800 cm
<b>Package 1 Length</b>	8.500 cm
<b>Package 1 Weight</b>	282.900 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

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	12 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Mercury Free

Rohs Exemption Information Yes

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Compliant with Exemptions

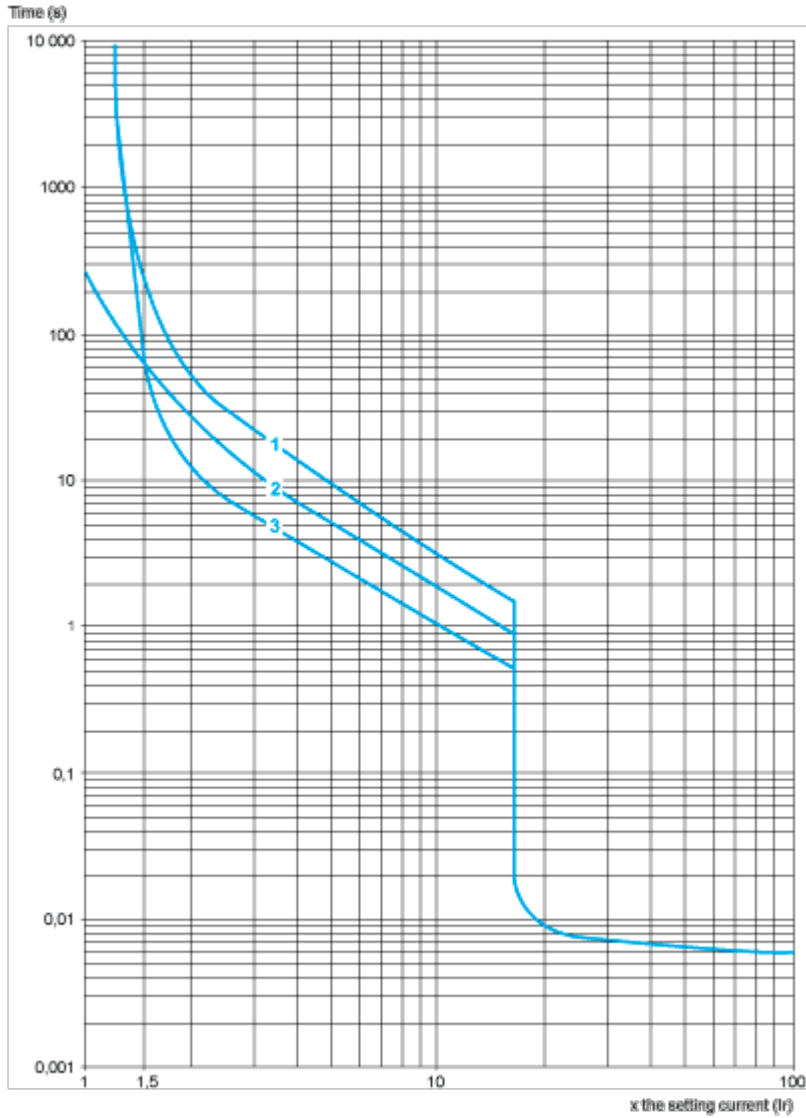
China Rohs Regulation [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information

Environmental Disclosure [Product Environmental Profile](#)

Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile [End of Life Information](#)

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

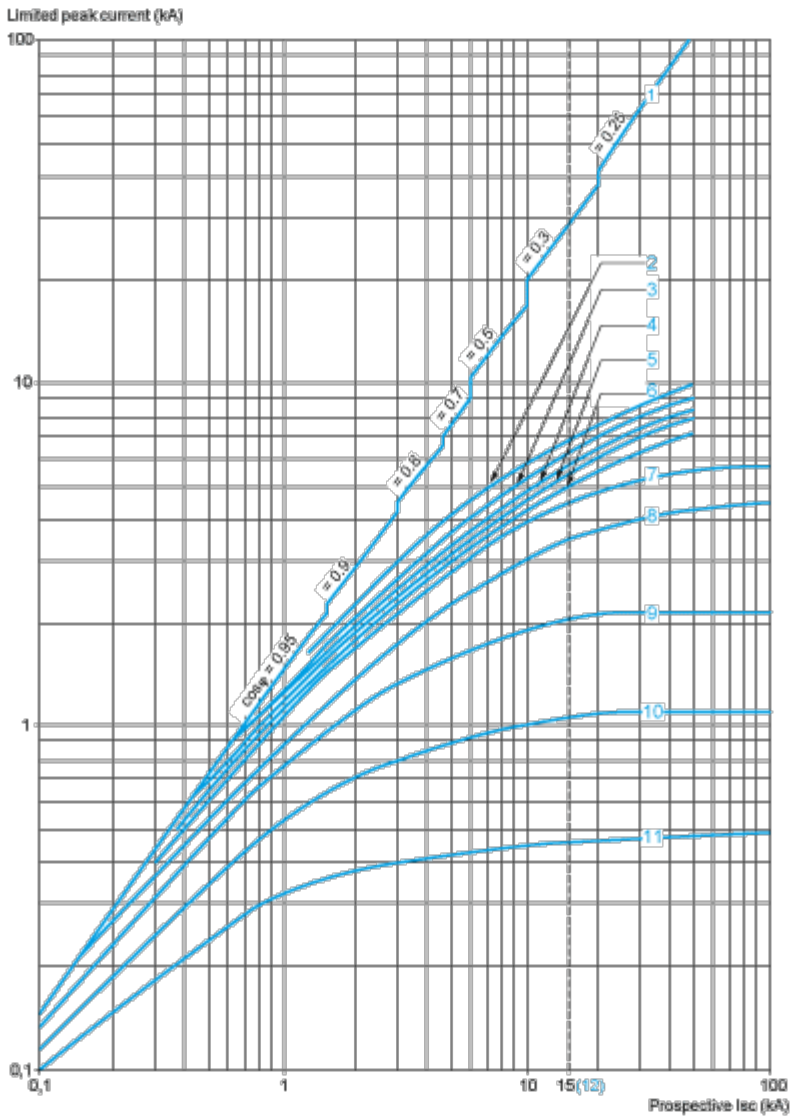


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

**Dynamic Stress**

I peak = f (prospective I<sub>sc</sub>) at 1.05 U<sub>e</sub> = 435 V

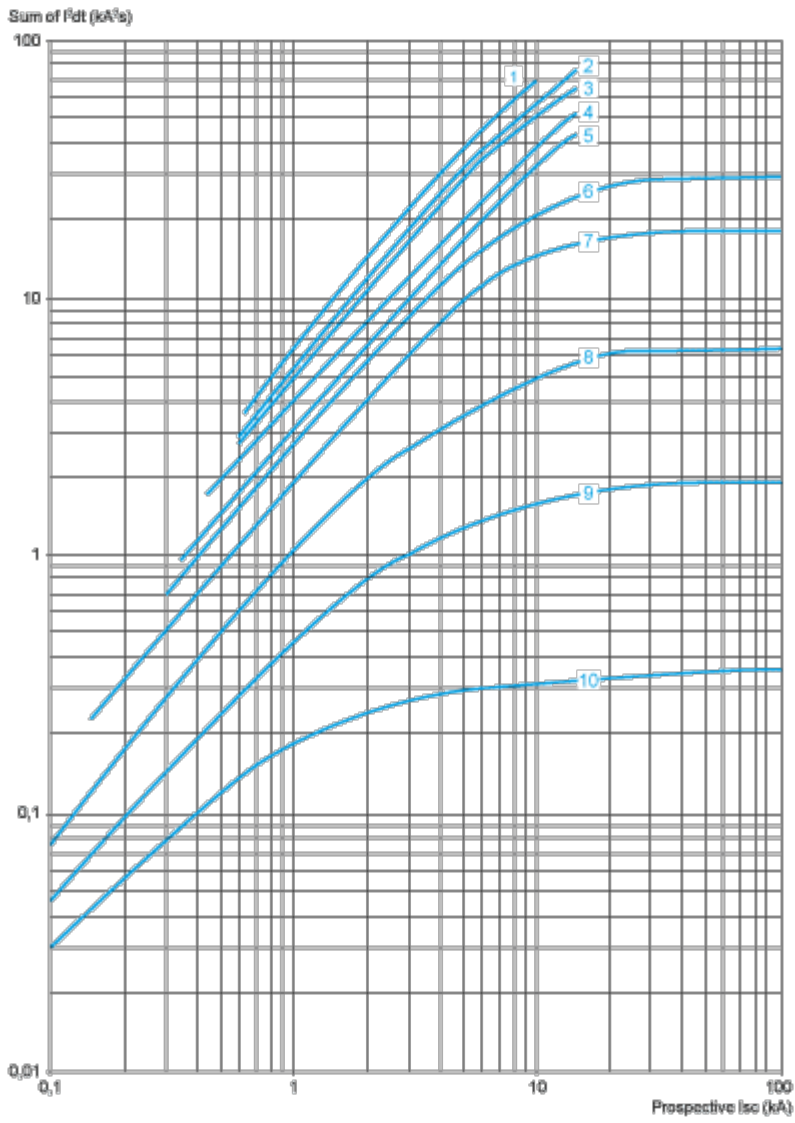


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

**Thermal Limit on Short-Circuit for GV2ME**

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

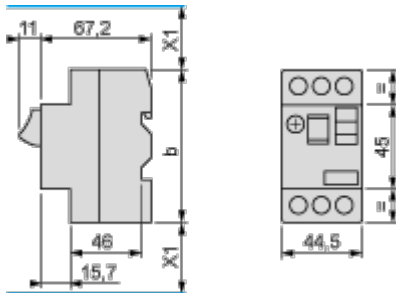
Sum of  $I^2dt = f$  (prospective Isc) at 1.05 Ue = 435 V



- 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

### Dimension

#### GV2ME



(1) Maximum

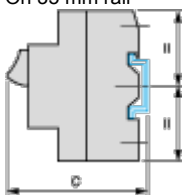
X1 Electrical clearance = 40 mm for  $U_e \leq 690$  V

	b
GV2ME $\bullet\bullet$	89
GV2ME $\bullet\bullet$ 3	101

### Mounting

#### GV2ME

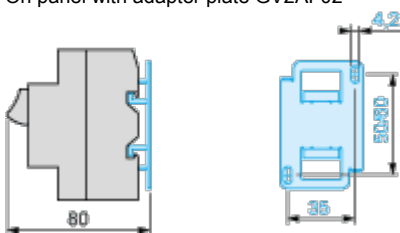
On 35 mm rail



$c = 78.5$  on AM1 DP200 (35 x 7.5)

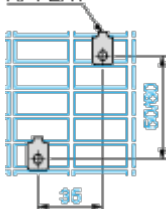
$c = 86$  on AM1 DE200, ED200 (35 x 15)

On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA

AF1 EA4



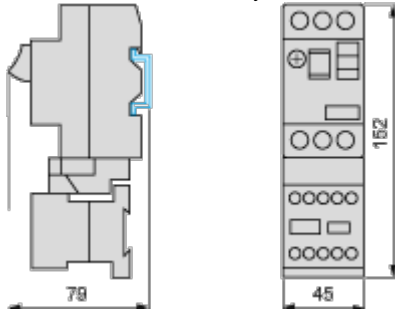
On rails DZ5 MB201





**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



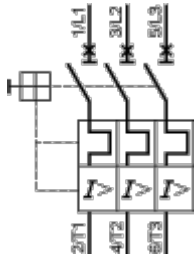
GV2ME +	LC1D09...D18	LC1D25 and D32
b	176.4	186.8
c1	103.1	136.4
c	135.6	141.9
d1	107	107
d	112.5	112.5

GV2ME + GV1L3 (Current Limiter)



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

GV2ME•• and GV2RT



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

