# **Product datasheet**

Specification





# Motor circuit breaker, TeSys GV2, 3P, 9-14 A, thermal magnetic, spring terminals

GV2ME163

## 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
·	or .
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
	A0-36 comonning to IEO 00347-4-1
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	5.5 kW at 400/415 V AC 50/60 Hz
	7.5 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
	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	100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2
Breaking Capacity	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	14 A
Thermal Protection Adjustment Range	914 A conforming to IEC 60947-4-1
Magnetic Tripping Current	170 A
[Ith] Conventional Free Air Thermal Current	14 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

Phase Failure Sensitivity	Yes conforming to IEC 60947-4-1	
Suitability For Isolation	Yes conforming to IEC 60947-1 § 7-1-6	
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	Continuous conforming to IEC 60947-4-1	
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
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	-4080 °C
Fire Resistance	960 °C conforming to IEC 60695-2-11
Ambient Air Temperature For Operation	-2060 °C
Mechanical Robustness	Shocks: 30 Gn for 11 ms Vibrations: 5 Gn, 5150 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 cm
Package 1 Length	8.5 cm
Package 1 Weight	316 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	6.544 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	320
Package 3 Height	75 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	116.9 kg

# **Contractual warranty**

Warranty 18 months

# Sustainability Screen Premium\*

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass 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

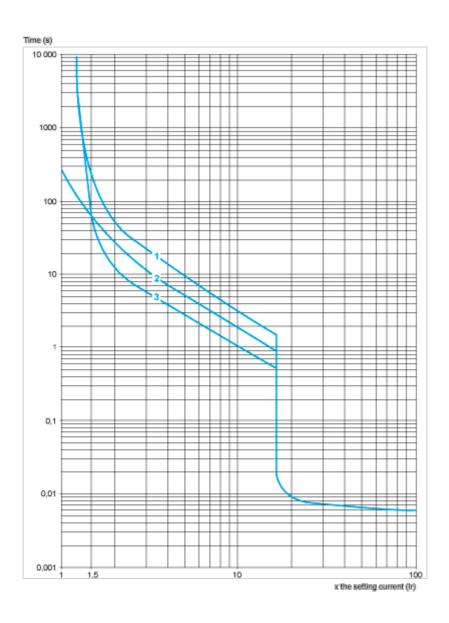
## **Certifications & Standards**

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	

#### **Performance Curves**

### Thermal-Magnetic Tripping Curves for GV2ME and GV2P

Average Operating Times at 20 °C Related to Multiples of the Setting Current

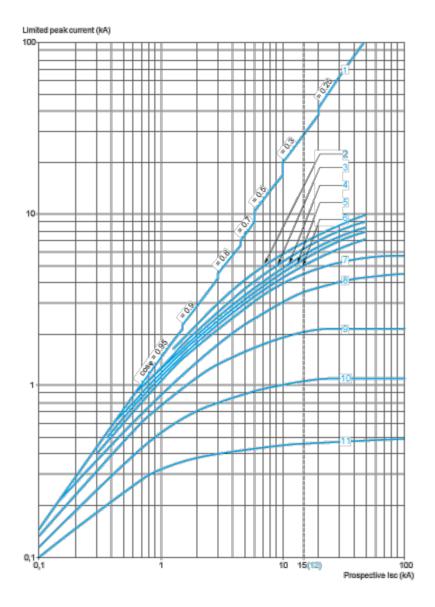


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

**Dynamic Stress** 

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



- Maximum peak current 1
- 2 24-32 A
- 3 20-25 A
- 17-23 A 4
- 5 13-18 A
- 9-14 A
- 6

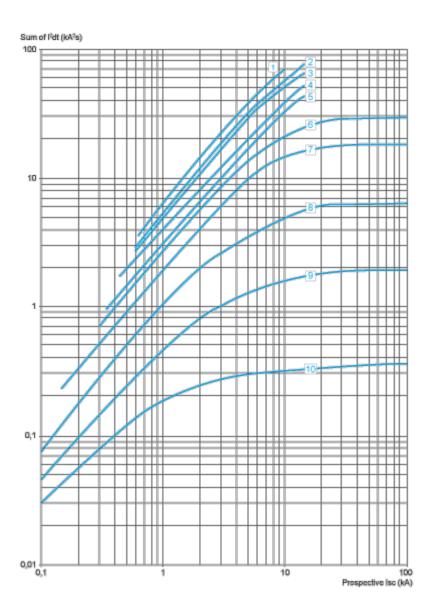
7

- 6-10 A 4-6.3 A 8
- 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<sup>2</sup>s in the Magnetic Operating Zone

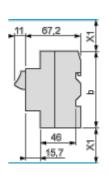
Sum of  $I^2$ dt = f (prospective lsc) at 1.05 Ue = 435 V

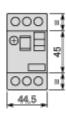


- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
- 7 4-6.3 A
- 8 2.5-4 A
- 9 1.6-2.5 A
- 10 1-1.6 A

#### **Dimensions Drawings**

#### **Dimension GV2ME**





#### (1) Maximum

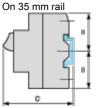
X1 Electrical clearance = 40 mm for Ue ≤ 690 V

	b
GV2ME <sub>●●</sub>	89
GV2ME <sub>●●</sub> 3	101

#### Mounting

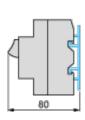
#### **GV2ME**

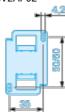




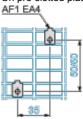
c = 78.5 on AM1 DP200 (35 x 7.5) c = 86 on AM1 DE200, ED200 (35 x 15)

On panel with adapter plate GV2AF02

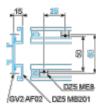




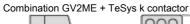
On pre-slotted plate AM1 PA

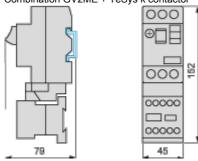


On rails DZ5 MB201



#### GV2AF01





#### **GV2AF3**

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Combination GV2ME + TeSys d contactor

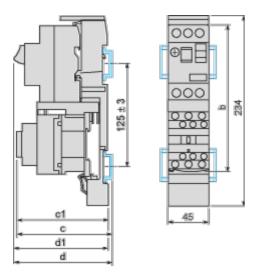
GV2ME +	LC1D09D18	LC1D25 and D32
b	176.4	186.8
c1	94.1	100.4
С	99.6	105.9

#### GV2AF4 + LAD311

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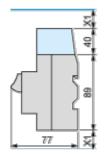
Combination GV2ME + TeSys d contactor

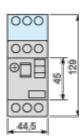
# **GV2ME163**



GV2ME +	LC1D09D18	LC1D25 and D32
b	176.4	186.8
c1	103.1	136.4
С	135.6	141.9
d1	107	107
d	112.5	112.5

GV2ME + GV1L3 (Current Limiter)

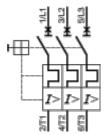




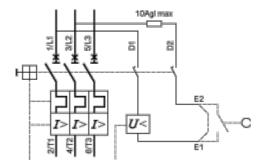
X1 = 10 mm for Ue = 230 V or 30 mm for 230 V < Ue  $\leq$  690 V

#### Connections and Schema

#### GV2ME•• and GV2RT



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



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