

# Product data sheet

Specifications



## Motor circuit breaker, TeSys Deca, 3P, 0.1-0.16 A, thermal magnetic, spring terminals

GV2ME013

### Main

Range of product	TeSys GV2
Range	TeSys TeSys Deca
Device short name	GV2ME
Product name	TeSys GV2 TeSys Deca
Product or component type	Circuit breaker
Device application	Motor
Trip unit technology	Thermal-magnetic

### Complementary

Poles description	3P
Network type	AC
Utilisation category	AC-3 conforming to IEC 60947-4-1 Category A conforming to IEC 60947-2
Network frequency	50/60 Hz conforming to IEC 60947-4-1
Fixing mode	35 mm symmetrical DIN rail: clipped Panel: screwed (with adaptor plate)
Operating position	Any position
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 690 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 230/240 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 400/415 V AC 50/60 Hz conforming to IEC 60947-2
Control type	Push-button
[In] rated current	0.16 A
Thermal protection adjustment range	0.1...0.16 A
Magnetic tripping current	1.5 A
[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

<b>[Ith] conventional free air thermal current</b>	0.16 A conforming to IEC 60947-4-1
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947-2
<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 440 V
<b>Maximum operating rate</b>	25 cyc/h
<b>Rated duty</b>	Continuous conforming to IEC 60947-4-1
<b>Suitability for isolation</b>	Yes conforming to IEC 60947-1
<b>Phase failure sensitivity</b>	Yes conforming to IEC 60947-4-1
<b>Height</b>	101 mm
<b>Width</b>	45 mm
<b>Depth</b>	78.5 mm
<b>Net weight</b>	0.28 kg
<b>Colour</b>	Dark grey

## Environment

<b>Standards</b>	EN/IEC 60947-2 EN/IEC 60947-4-1 CSA C22.2 No 60947-4-1 UL 60947-4-1
<b>Product certifications</b>	IECEE CB Scheme UL CSA CCC EAC ATEX BV LROS (Lloyds register of shipping) DNV-GL RINA UKCA
<b>Protective treatment</b>	TH
<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>IK degree of protection</b>	IK04
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>Ambient air temperature for storage</b>	-40...80 °C
<b>Fire resistance</b>	960 °C conforming to IEC 60695-2-1
<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 Weight</b>	268 g
<b>Package 1 Height</b>	5.6 cm
<b>Package 1 width</b>	8.5 cm
<b>Package 1 Length</b>	11.1 cm
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Weight</b>	5.73 kg

<b>Package 2 Height</b>	15 cm
<b>Package 2 width</b>	30 cm
<b>Package 2 Length</b>	40 cm

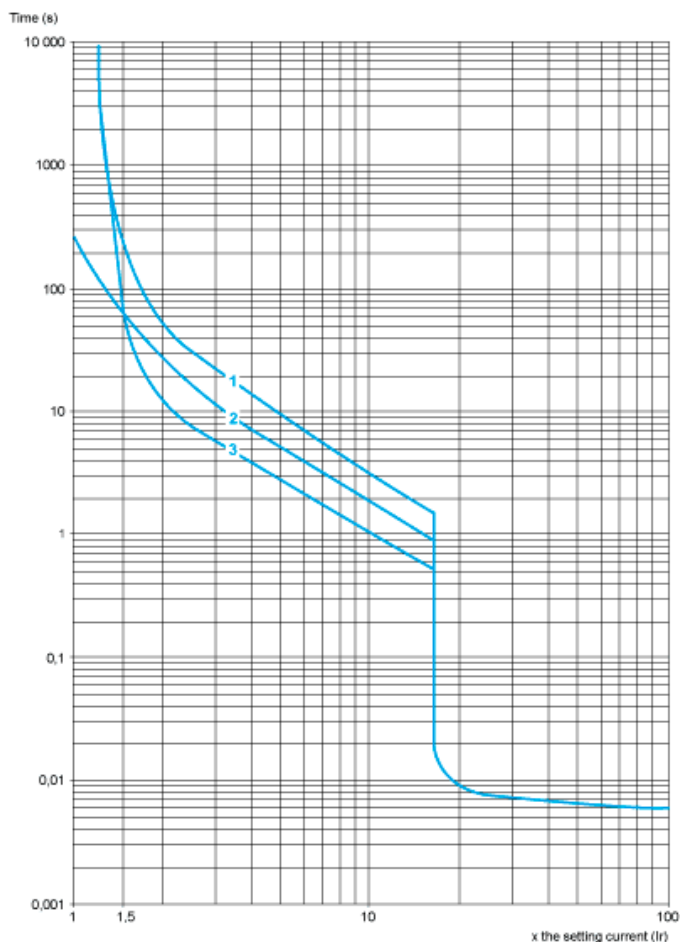
## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

<b>Warranty</b>	18 months
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**Thermal-Magnetic Tripping Curves for GV2ME and GV2P**  
Average Operating Times at 20 °C Related to Multiples of the Setting Current

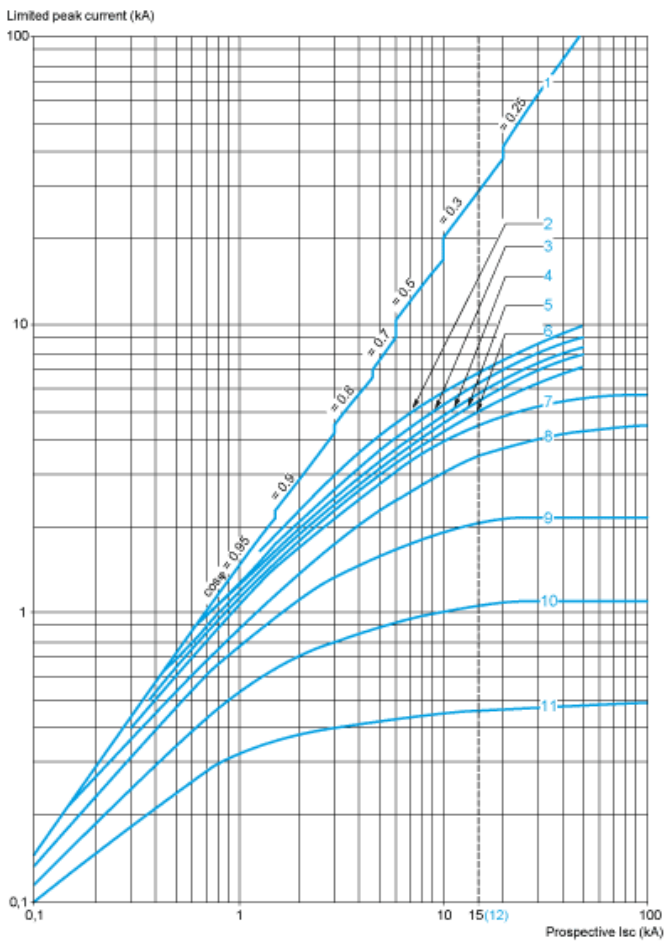


- 1** 3 poles from cold state
- 2** 2 poles from cold state
- 3** 3 poles from hot state

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

**Dynamic Stress**

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



- 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<sup>2</sup>s in the Magnetic Operating Zone**

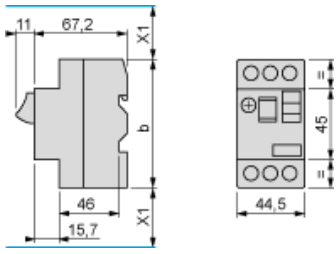
Sum of  $I^2dt = f$  (prospective Isc) at 1.05 Ue = 435 V



- 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**



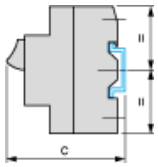
(1) Maximum  
X1 Electrical clearance = 40 mm for Ue # 690 V

	b
GV2ME##	89
GV2ME##3	101

**Mounting**

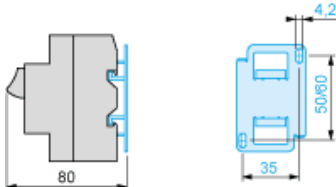
**GV2ME**

On 35 mm rail

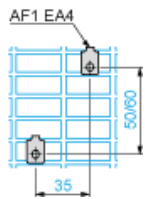


c = 78.5 on AM1 DP200 (35 x 7.5)  
c = 86 on AM1 DE200, ED200 (35 x 15)

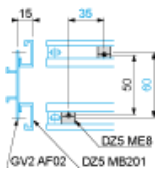
On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA

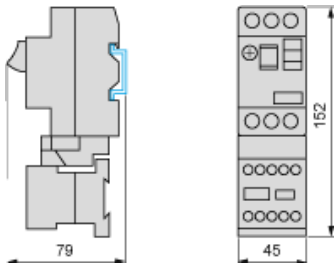


On rails DZ5 MB201



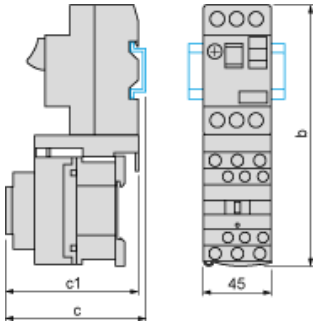
**GV2AF01**

Combination GV2ME + TeSys k contactor



**GV2AF3**

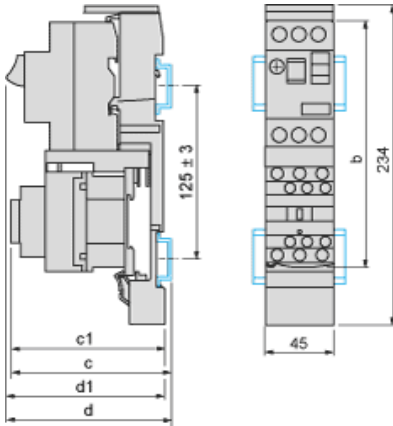
Combination GV2ME + TeSys d contactor



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

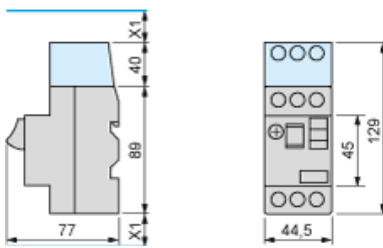
GV2AF4 + LAD311

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

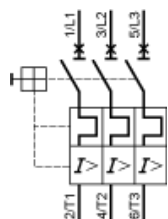
GV2ME + GV1L3 (Current Limiter)



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



**GV2ME•• and GV2RT**



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

