Product data sheet

Specifications



TeSys Deca Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 13 to 18 A, screw clamp

GV2ME20

Product availability: Stock - Normally stocked in distribution facility

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 IEC 60947-2 AC-3 IEC 60947-4-1 AC-3e IEC 60947-4-1
Network frequency	50/60 Hz IEC 60947-2
Motor power kW	7.5 kW 400/415 V AC 50/60 Hz 9 kW 500 V AC 50/60 Hz 15 kW 690 V AC 50/60 Hz
Breaking capacity	100 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2 15 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2 8 kA Icu 440 V AC 50/60 Hz IEC 60947-2 6 kA Icu 500 V AC 50/60 Hz IEC 60947-2 3 kA Icu 690 V AC 50/60 Hz IEC 60947-2
[Ics] rated service short-circuit breaking capacity	100 % 230/240 V AC 50/60 Hz IEC 60947-2 50 % 400/415 V AC 50/60 Hz IEC 60947-2 50 % 440 V AC 50/60 Hz IEC 60947-2 75 % 500 V AC 50/60 Hz IEC 60947-2 75 % 690 V AC 50/60 Hz IEC 60947-2
Control Type	Push-button
Line Rated Current	18 A
Thermal protection adjustment range	13…18 A IEC 60947-2
Magnetic tripping current	341 A
[Ith] conventional free air thermal current	18 A IEC 60947-2
[Ue] rated operational voltage	690 V AC 50/60 Hz IEC 60947-2
[Ui] rated insulation voltage	690 V AC 50/60 Hz IEC 60947-2
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-2
Phase failure sensitivity	Yes IEC 60947-4-1

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Suitability for isolation	Yes IEC 60947-1
Power dissipation per pole	2.5 W
Mechanical durability	100000 cycles
Electrical durability	100000 cycles AC-3 415 V In 100000 cycles AC-3e 415 V In
Rated duty	Uninterrupted IEC 60947-4-1
Connections - terminals	Power circuit: screw clamp terminal 2 cable(s) 0.002…0.009 in² (1…6 mm²) - solid Power circuit: screw clamp terminal 2 cable(s) 0.002…0.009 in² (1.5…6 mm²) - flexible without cable end Power circuit: screw clamp terminal 2 cable(s) 0.002…0.006 in² (1…4 mm²) - flexible with cable end
Tightening torque	15.05 lbf.in (1.7 N.m) screw clamp terminal
Fixing mode	35 mm symmetrical DIN rail clipped Panel screwed with adaptor plate)
Mounting position	Horizontal Vertical
Width	1.8 in (45 mm)
Height	3.5 in (89 mm)
Depth	3.09 in (78.5 mm)
Net Weight	0.57 lb(US) (0.26 kg)
color	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	CB Scheme CE UKCA CCC cULus EAC ATEX LROS (Lloyds register of shipping) BV RINA DNV-GL
IK degree of protection	IK04
IP degree of protection	IP20 IEC 60529
Climatic withstand	IACS E10
Ambient Air Temperature for Storage	-40…176 °F (-40…80 °C)
Fire resistance	1760 °F (960 °C) IEC 60695-2-11
Ambient air temperature for operation	-4…140 °F (-20…60 °C)
Mechanical robustness	Shocks 30 Gn for 11 ms Vibrations 5 Gn, 5...150 Hz
Operating altitude	<= 6561.68 ft (2000 m)

Ordering and shipping details

Category	US1CTR121253

Discount Schedule	CTR1
GTIN	3389110343199
Returnability	Yes
Country of origin	TH

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.969 in (5.000 cm)
Package 1 Width	3.150 in (8.000 cm)
Package 1 Length	3.543 in (9.000 cm)
Package weight(Lbs)	9.877 oz (280.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	15.653 lb(US) (7.100 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	29.528 in (75.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	265.058 lb(US) (120.228 kg)

Contractual warranty

Warranty (in months)	18

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	**11 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**2 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**9 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.5 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**04104e70-ba29-493c-b2cc-b5837d1f879b**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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 and/or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**

Use Again

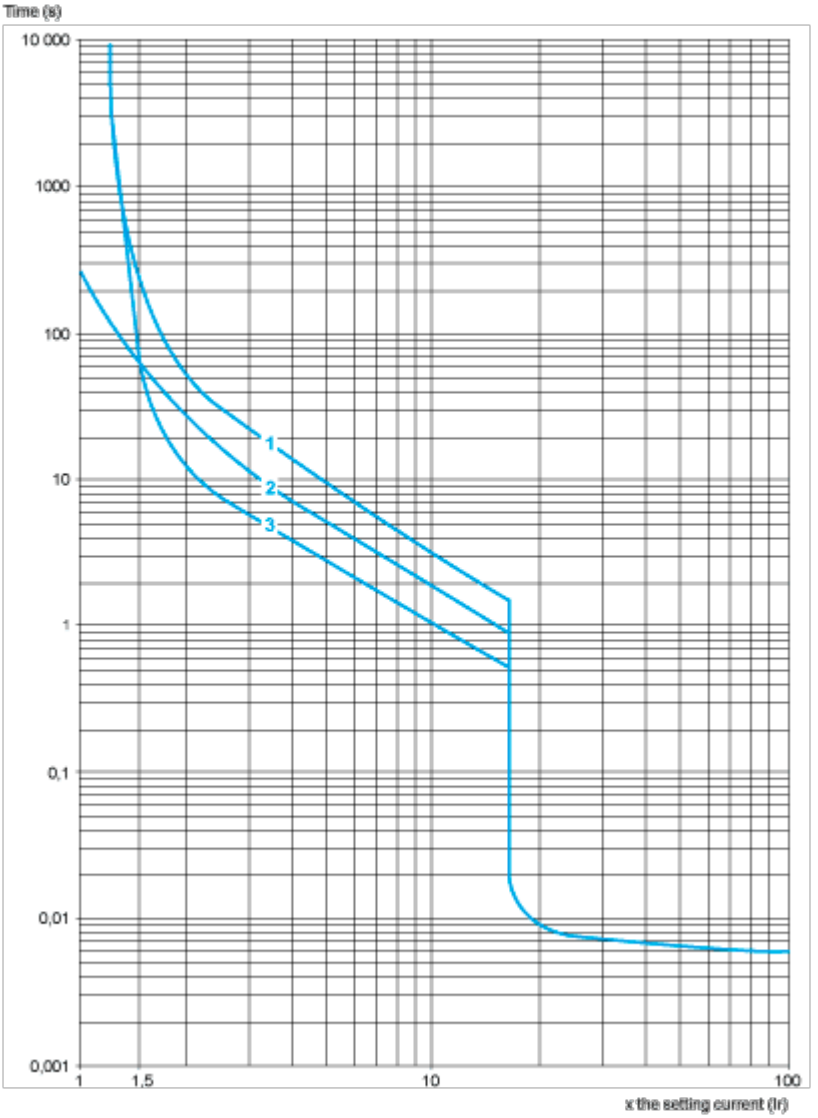
Repack and remanufacture

Recyclability potential, in %	**49**
Circularity Profile	**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

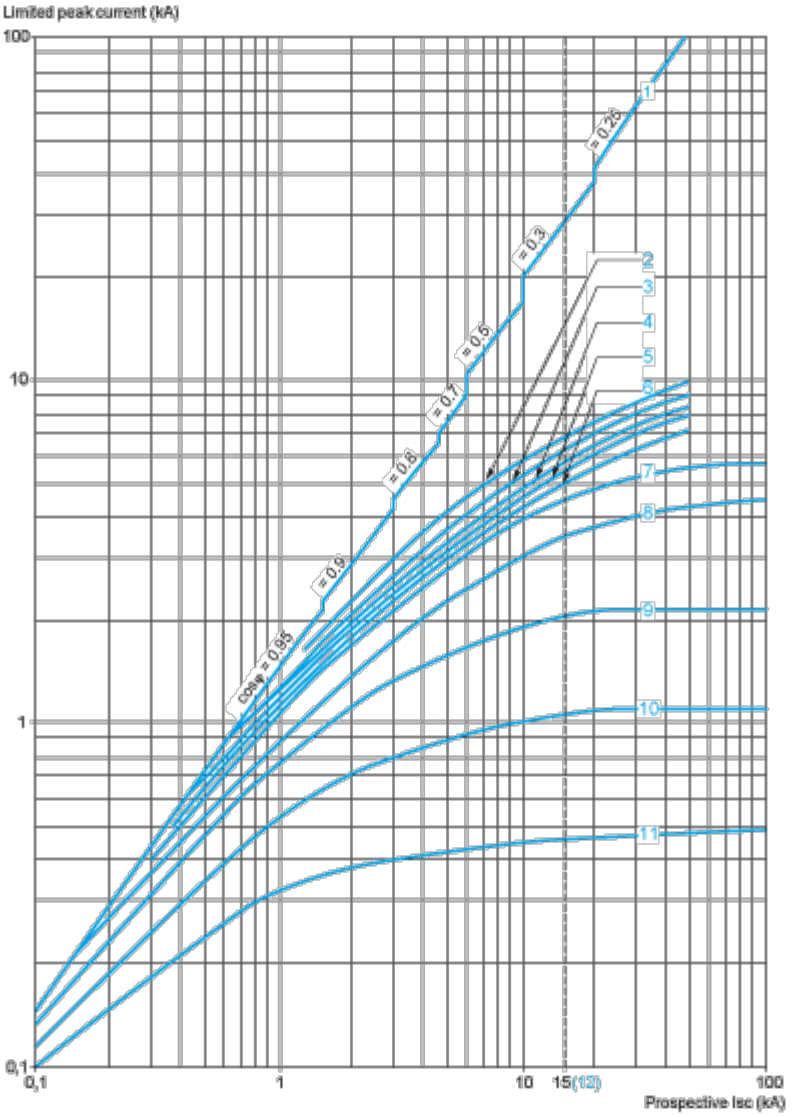
2 2 poles from cold state

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

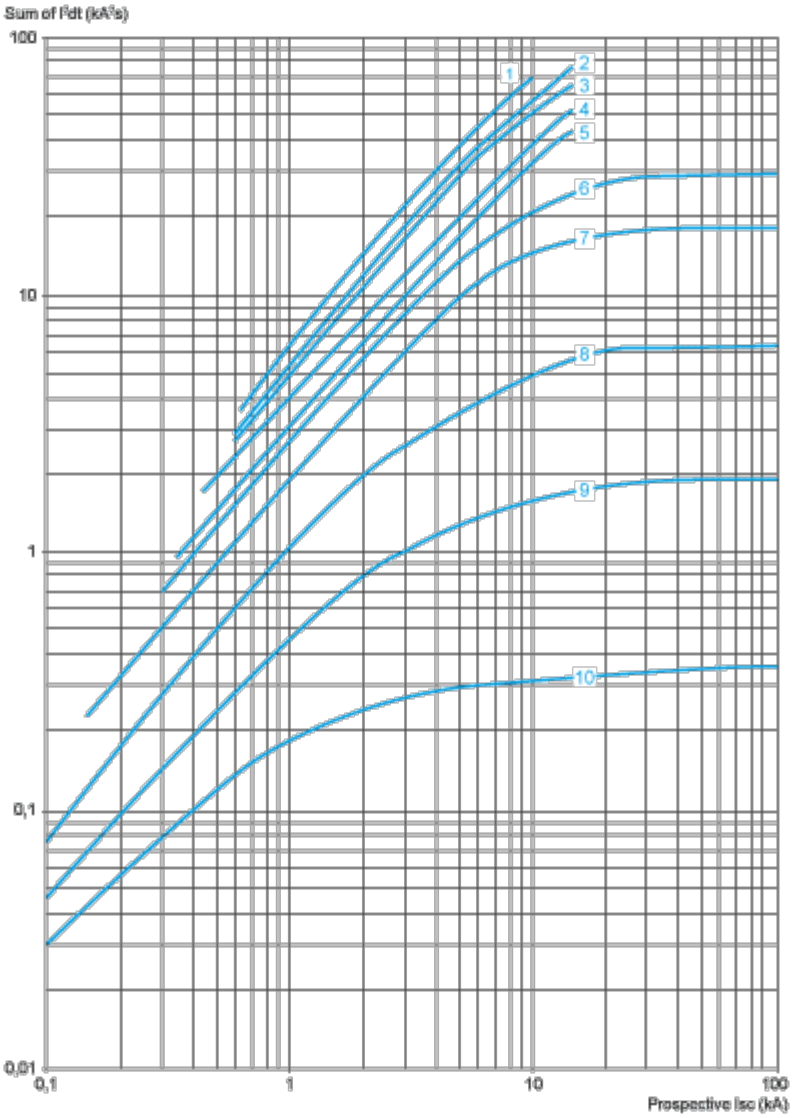
11 1-1.6 A

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

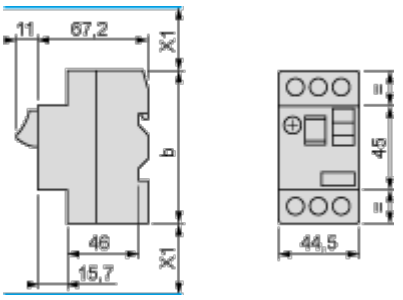
9 1.6-2.5 A

10 1-1.6 A

Dimensions Drawings

Dimension

GV2ME



(1) Maximum

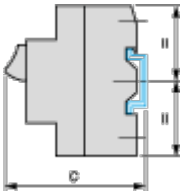
X1 Electrical clearance = 40 mm for Ue ≤ 690 V

	b
GV2ME••	89
GV2ME••3	101

Mounting

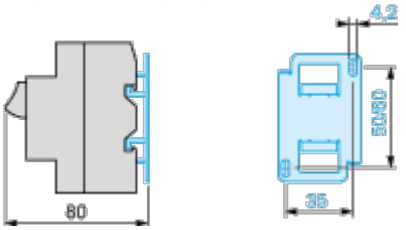
GV2ME

On 35 mm rail

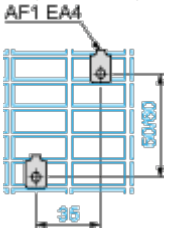


c = 78.5 on AM1 DP200 (35 x 7.5)
c = 86 on AM1 DE200, ED200 (35 x 15)

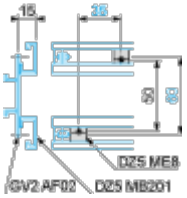
On panel with adapter plate GV2AF02



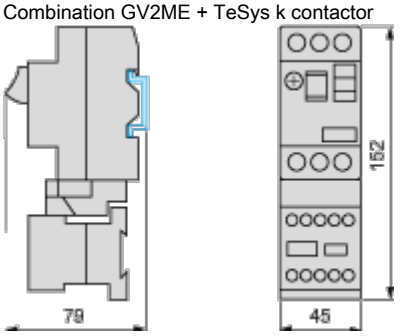
On pre-slotted plate AM1 PA



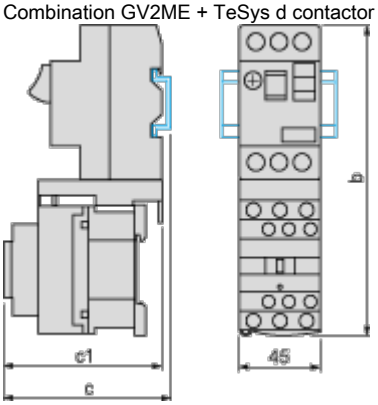
On rails DZ5 MB201



GV2AF01
Combination GV2ME + TeSys k contactor

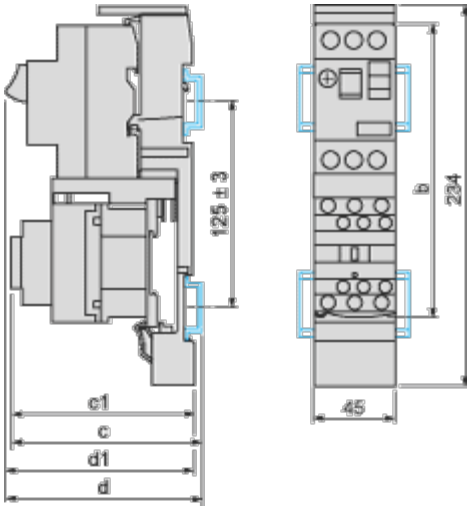


GV2AF3
Combination GV2ME + TeSys d contactor



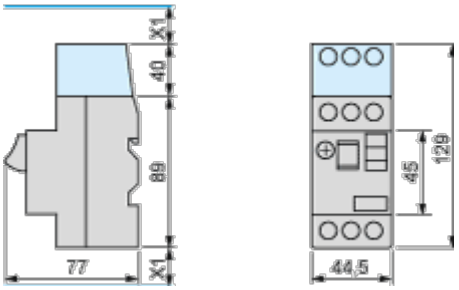
GV2ME +	LC1D09…D18	LC1D25 and D32
b	176.4	186.8
c1	94.1	100.4
c	99.6	105.9

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

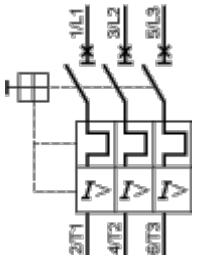
GV2ME + GV1L3 (Current Limiter)



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

Connections and Schema

GV2ME•• and GV2RT



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

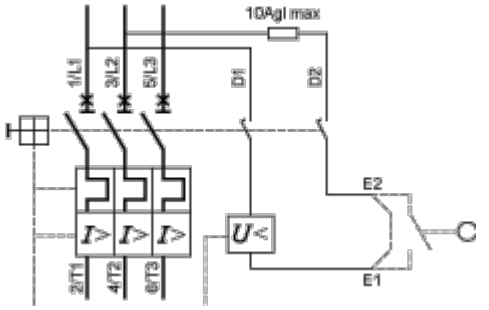
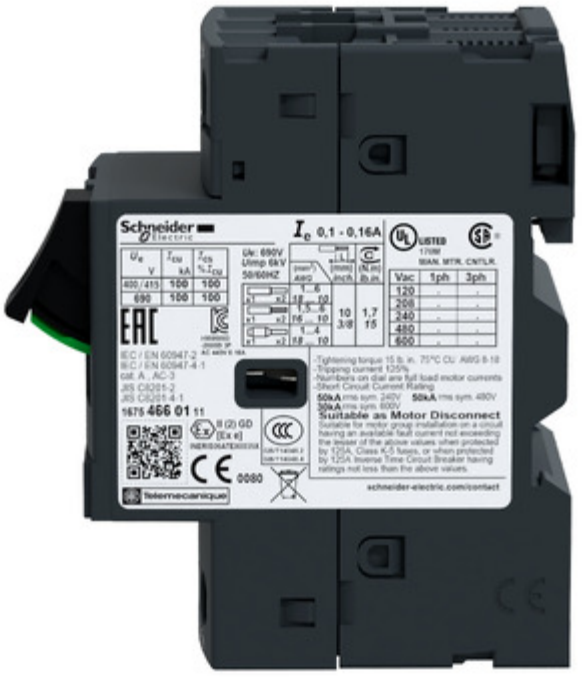


Image of product / Alternate images

Alternative


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Suitable as Motor Disconnect
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