

GV2ME21

TeSys Deca Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 17 to 23 A, screw clamp



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 IEC 60947-2 AC-3 IEC 60947-4-1 AC-3e IEC 60947-4-1
Network frequency	50/60 Hz IEC 60947-4-1
Fixing mode	35 mm symmetrical DIN rail clipped Panel screwed with adaptor plate)
Motor power kW	9 kW 400/415 V AC 50/60 Hz 11 kW 500 V AC 50/60 Hz 18.5 kW 690 V AC 50/60 Hz
Breaking capacity	50 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 6 KA Icu 440 V AC 50/60 Hz IEC 60947-2 4 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 40 % 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	23 A
Thermal protection adjustment range	17...23 A IEC 60947-4-1
Magnetic tripping current	327 A
[Ith] conventional free air thermal current	23 A IEC 60947-4-1
[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
Suitability for isolation	Yes IEC 60947-1 § 7-1-6
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	Continuous IEC 60947-4-1
Tightening torque	15.05 lbf.in (1.7 N.m) screw clamp terminal

Width	1.77 in (45 mm)
Height	3.50 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
Product Certifications	CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]ATEX[RETURN]LROS (Lloyds register of shipping)[RETURN]BV[RETURN]RINA[RETURN]DNV- GL[RETURN]UKCA
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	22367-MANUAL STR PROTECTOR - GV2
Discount Schedule	I11
GTIN	3389110343212
Returnability	Yes
Country of origin	TH

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.66 in (9.300 cm)
Package 1 Width	1.89 in (4.800 cm)
Package 1 Length	3.35 in (8.500 cm)
Package 1 Weight	10.12 oz (287.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	15.94 lb(US) (7.228 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	277.76 lb(US) (125.988 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
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. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	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^2s in the Magnetic Operating Zone

Sum of $I^2dt = f(\text{prospective } I_{sc})$ at $1.05 U_e = 435 V$



- 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



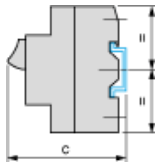
- (1) Maximum
X1 Electrical clearance = 40 mm for $U_e \leq 690$ V

	b
GV2ME..	89
GV2ME..3	101

Mounting

GV2ME

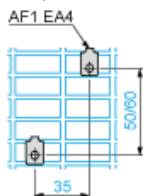
On 35 mm rail



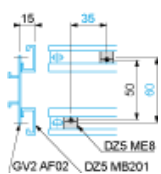
- $c = 78.5$ on AM1 DP200 (35 x 7.5)
 $c = 86$ on AM1 DE200, ED200 (35 x 15)
 On panel with adapter plate GV2AF02



On pre-slotted plate AM1 PA



On rails DZ5 MB201



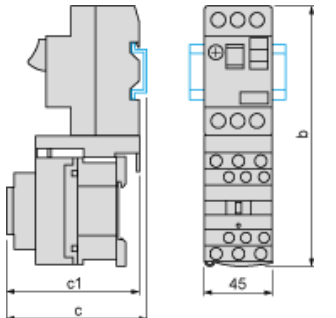
GV2AF01

Combination GV2ME + TeSys k contactor



GV2AF3

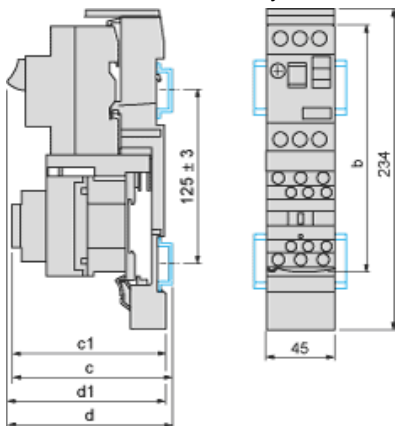
Combination GV2ME + TeSys d contactor



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

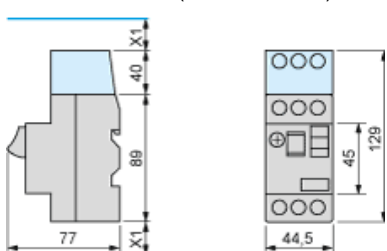
GV2AF4 + LAD311

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

