

GV2ME21

TeSys GV2 Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 17 to 23 A, screw clamp

Product availability : Stock - Normally stocked in distribution facility



Main

Range	TeSys
Product name	TeSys GV2
Device short name	GV2ME
Device application	Motor
Trip unit technology	Thermal-magnetic

Complementary

Poles description	3P
Network type	AC
Utilisation category	AC-3 IEC 60947-4-1 Category A IEC 60947-2
Network frequency	50/60 Hz IEC 60947-4-1
Fixing mode	35 mm symmetrical DIN rail clipped (Panel screwed with adaptor plate)
Operating position	Any position
Motor power kW	9 kW 400/415 V AC 50/60 Hz 11 kW at 500 V AC 50/60 Hz 18.5 kW 690 V AC 50/60 Hz
Breaking capacity	3 kA Icu 690 V AC 50/60 Hz IEC 60947-2 15 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2 50 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 6 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 4 kA Icu at 500 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 75 % 690 V AC 50/60 Hz IEC 60947-2 75 % 500 V AC 50/60 Hz IEC 60947-2 50 % 440 V AC 50/60 Hz IEC 60947-2

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

40 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2

Control type	Push-button
Line Rated Current	23 A
Thermal protection adjustment range	17...23 A
Magnetic tripping current	327 A
[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
[Ith] conventional free air thermal current	23 A IEC 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-2
Power dissipation per pole	2.5 W
Mechanical durability	100000 cycles
Electrical durability	100000 cycles AC-3 440 V
Maximum operating rate	25 cyc/h
Rated duty	Continuous conforming to IEC 60947-4-1
Connections - terminals	screw clamp terminals 2 0.00...0.01 in ² (1...6 mm ²) solid screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²) flexible without cable end screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible with cable end
Tightening torque	15.05 lbf.in (1.7 N.m) screw clamp terminals
Suitability for isolation	Yes conforming to IEC 60947-1
Phase failure sensitivity	Yes IEC 60947-4-1
Height	3.50 in (89 mm)
Width	1.77 in (45 mm)
Depth	3.09 in (78.5 mm)
Net Weight	0.57 lb(US) (0.26 kg)

Environment

Standards	EN/IEC 60947-2 EN/IEC 60947-4-1 CSA C22.2 No 60947-4-1 UL 60947-4-1
Product certifications	IECEE CB Scheme UL CSA CCC EAC ATEX BV LROS (Lloyds register of shipping) DNV-GL RINA
Protective treatment	TH
IP degree of protection	IP20 IEC 60529
IK degree of protection	IK04
Ambient air temperature for operation	-4...140 °F (-20...60 °C)
Ambient air temperature for storage	-40...176 °F (-40...80 °C)
Fire resistance	1760 °F (960 °C) IEC 60695-2-1
Operating altitude	2000 m

Ordering and shipping details

Category	22367 - MANUAL STR PROTECTOR - GV2
Discount Schedule	I11
GTIN	00785901212010
Nbr. of units in pkg.	1
Package weight(Lbs)	0.65 lb(US) (0.29 kg)
Returnability	Yes
Country of origin	TH

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.89 in (4.8 cm)
Package 1 width	3.35 in (8.5 cm)
Package 1 Length	3.66 in (9.3 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Weight	16.35 lb(US) (7.415 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Weight	277.76 lb(US) (125.988 kg)
Package 3 Height	31.50 in (80 cm)
Package 3 width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)

Offer Sustainability

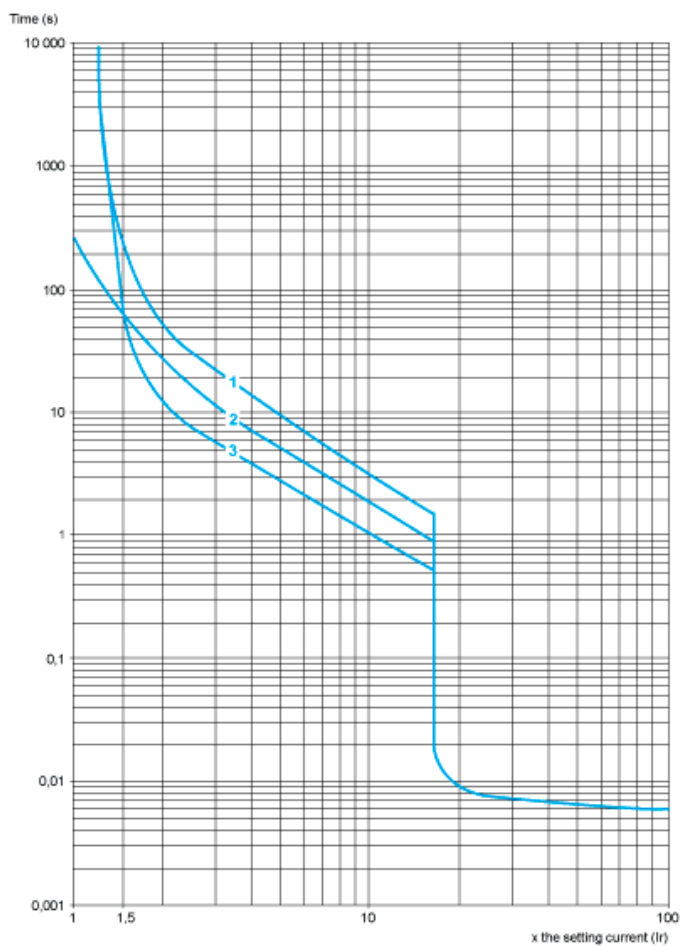
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
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.

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 (prospective I_{sc}) at 1.05 U_e = 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..	89
GV2ME..3	101

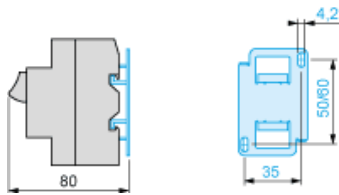
Mounting

GV2ME

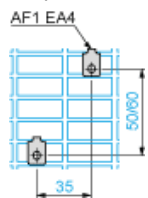
On 35 mm rail



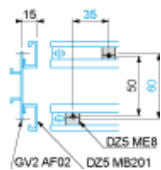
- $c = 78.5$ on AM1 DP200 (35 x 7.5)
 $c = 86$ on AM1 DE200, ED200 (35 x 15)
On panel with adapter plate GV2AF02



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 $U_e = 230\text{ V}$ or 30 mm for $230\text{ V} < U_e \leq 690\text{ V}$

GV2ME•• and GV2RT



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

