

Product datasheet

Characteristics

GV2ME086

TeSys GV2 - Circuit breaker - thermal-magnetic -
2.5...4 A - lugs-ring terminals



Main

Range	TeSys
Product name	TeSys GV2
Device short name	GV2ME
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	Clipped on 35 mm symmetrical DIN rail Screwed on panel (with adaptor plate)
Operating position	Any position
Motor power kW	3 kW at 690 V AC 50/60 Hz 1.1 kW at 400/415 V AC 50/60 Hz 1.5 kW at 400/415 V AC 50/60 Hz 1.5 kW at 500 V AC 50/60 Hz 2.2 kW at 500 V AC 50/60 Hz 2.2 kW at 690 V AC 50/60 Hz
Breaking capacity	3 kA Icu at 690 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 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
[Ics] rated service short-circuit breaking capacity	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 500 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 690 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	4 A
Trip unit rating	2.5...4 A
Magnetic tripping current	51 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
[Ith] conventional free air thermal current	4 A conforming to IEC 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-2
Power dissipation per pole	2.5 W
Mechanical durability	100000 cycles
Electrical durability	100000 cycles for AC-3 at 440 V
Operating rate	25 cyc/h
Rated duty	Continuous conforming to IEC 60947-4-1

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Connection pitch	13.5 mm without spreader
Connections - terminals	Lugs-ring terminals external diameter : 9.5 mm Bars 6 x 9.5 mm
Tightening torque	1.7 N.m on lugs-ring terminals M4 screw type 1.7 N.m on bars M4 screw type
Suitability for isolation	Yes conforming to IEC 60947-1
Phase failure sensitivity	Yes conforming to IEC 60947-4-1
Height	89 mm
Width	45 mm
Depth	78.2 mm
Product weight	0.26 kg

Environment

standards	EN 60204 IEC 60947-1 IEC 60947-2 IEC 60947-4-1 NF C 63-120 NF C 63-650 NF C 79-130 UL 508 VDE 0113 VDE 0660 CSA C22.2
product certifications	ATEX BV CCC CEBEC CSA DNV EZU GL LROS (Lloyds register of shipping) RINA SETI TSE UL EAC
protective treatment	TH
IP degree of protection	IP20 conforming to IEC 60529
IK degree of protection	IK04
ambient air temperature for operation	-20...60 °C
ambient air temperature for storage	-40...80 °C
fire resistance	960 °C conforming to IEC 60695-2-1
operating altitude	2000 m

Offer Sustainability

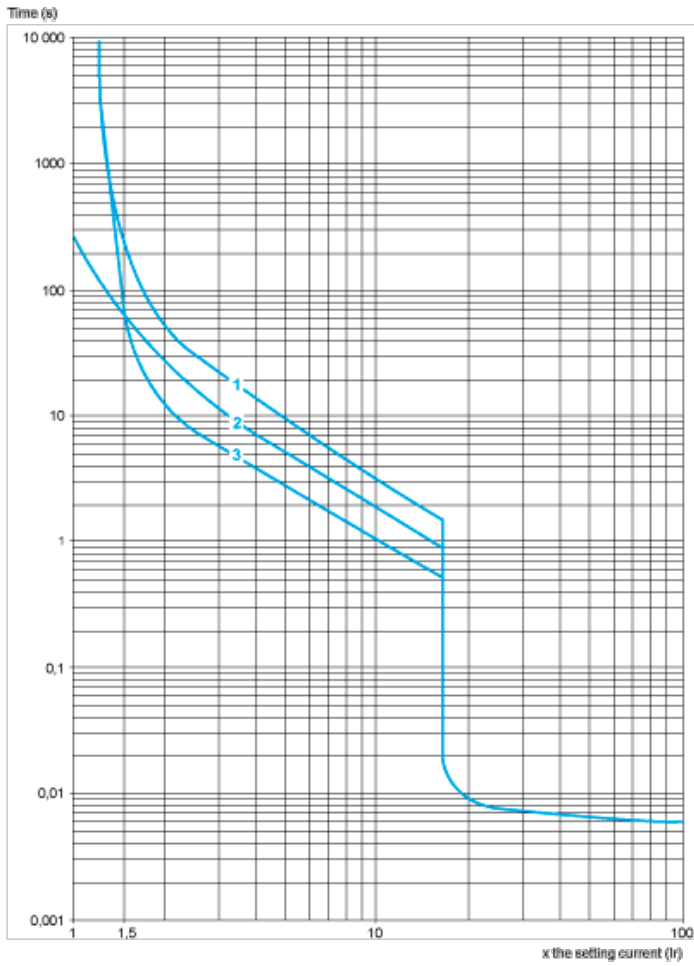
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0635 - Schneider Electric declaration of conformity
REACH	Reference contains SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

Contractual warranty

Warranty period	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

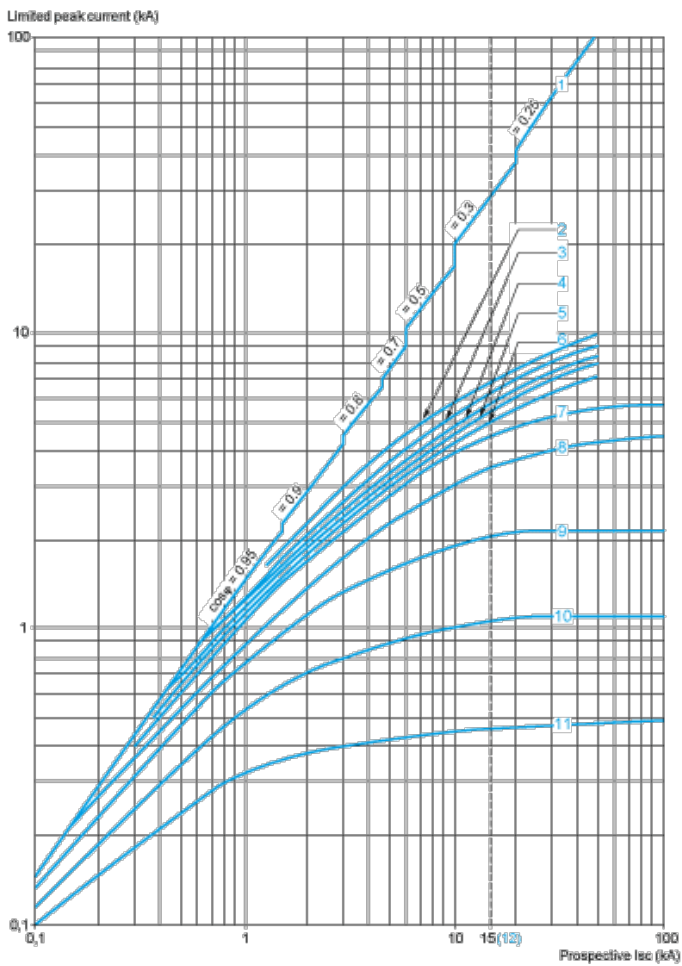


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

Dynamic Stress

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

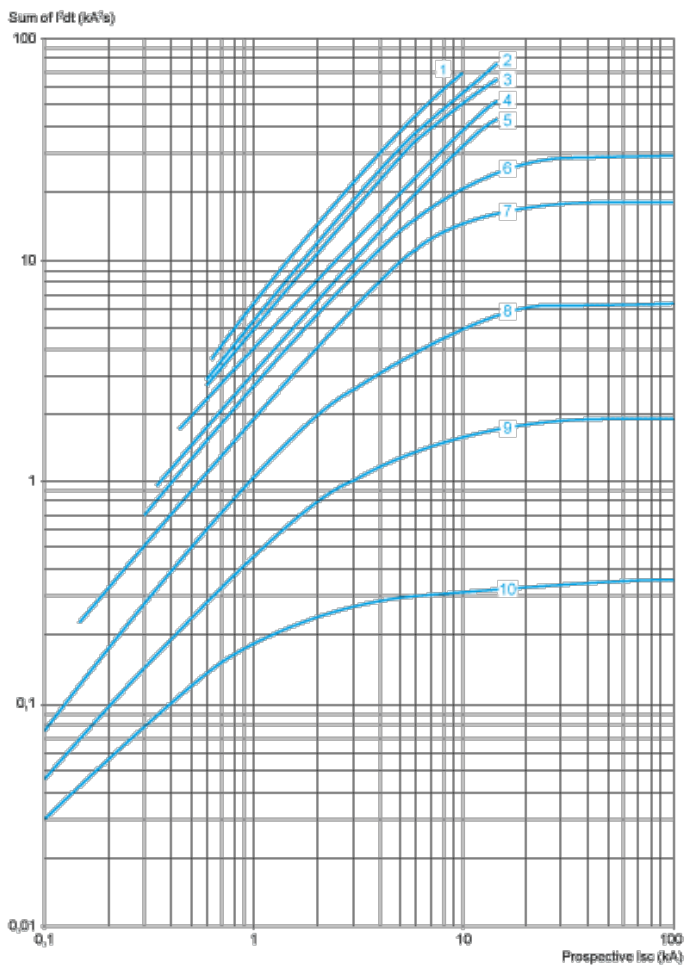


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

Thermal Limit on Short-Circuit for GV2ME

Thermal Limit in kA²s in the Magnetic Operating Zone

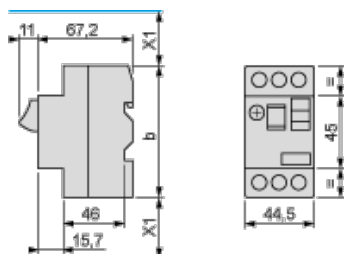
Sum of $I^2dt = f$ (prospective I_{sc}) at $1.05 U_e = 435 V$



- 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



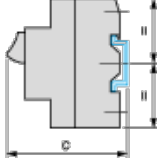
- (1) Maximum
 X1 Electrical clearance = 40 mm for $U_e \leq 690$ V

	b
GV2ME..	89
GV2ME..3	101

Mounting

GV2ME

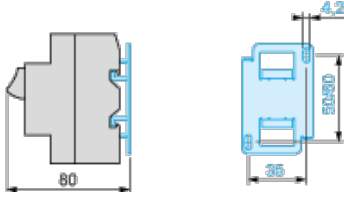
On 35 mm rail



$c = 78.5$ on AM1 DP200 (35 x 7.5)

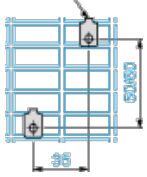
$c = 86$ on AM1 DE200, ED200 (35 x 15)

On panel with adapter plate GV2AF02

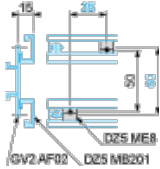


On pre-slotted plate AM1 PA

AF1 EA4

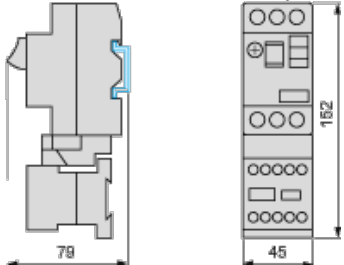


On rails DZ5 MB201



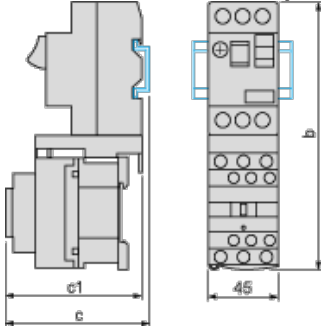
GV2AF01

Combination GV2ME + TeSys k contactor



GV2AF3

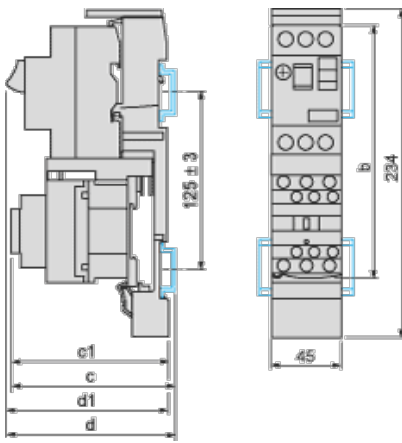
Combination GV2ME + TeSys d contactor



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

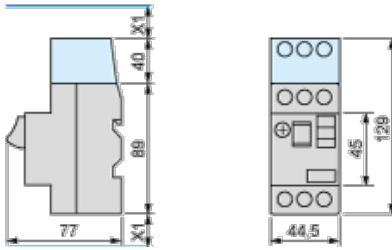
GV2AF4 + LAD311

Combination GV2ME + TeSys d contactor



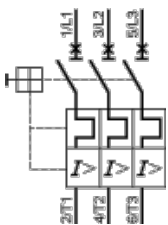
GV2ME +	LC1D09...D18	LC1D25 and D32
b	176.4	186.8
c1	103.1	136.4
c	135.6	141.9
d1	107	107
d	112.5	112.5

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

