

GV3P50

TeSys GV3 Manual Starter and Protector,
thermal magnetic circuit protector, rotary knob,
37 to 50 A, EverLink BTR



Main

Range	TeSys
Product name	TeSys GV3
Product or component type	Circuit breaker
Device short name	GV3P
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 3 x M4 screws)
Operating position	Any position
Motor power kW	22 KW 400/415 V AC 50/60 Hz 30 KW at 500 V AC 50/60 Hz 45 kW 690 V AC 50/60 Hz
Breaking capacity	100 KA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 50 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 6 KA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2 50 KA Icu 400/415 V AC 50/60 Hz IEC 60947-2 12 kA Icu 500 V AC 50/60 Hz 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 400/415 V AC 50/60 Hz conforming to IEC 60947-2 50 % 500 V AC 50/60 Hz IEC 60947-2 50 % 690 V AC 50/60 Hz IEC 60947-2
Control type	Rotary knob
Line Rated Current	50 A
Thermal protection adjustment range	37...50 A
Magnetic tripping current	700 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	50 A IEC 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-2
Power dissipation per pole	8 W
Mechanical durability	50000 cycles
Electrical durability	50000 cycles AC-3 440 V In
Maximum operating rate	25 cyc/h
Rated duty	Continuous conforming to IEC 60947-4-1
Tightening torque	44.25 Lbf.in (5 N.m) EverLink BTR screw connectors 0.04 in ² (25 mm ²) 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.05 in ² (35 mm ²)
Suitability for isolation	Yes conforming to IEC 60947-1

Phase failure sensitivity	Yes conforming to IEC 60947-4-1
Height	5.20 in (132 mm)
Width	2.17 in (55 mm)
Maximum Depth	5.35 in (136 mm)
Net Weight	2.12 lb(US) (0.96 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 ABS
Protective treatment	TH
IP degree of protection	IP20 conforming to IEC 60529
IK degree of protection	IK09
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-40...176 °F (-40...80 °C)
Fire resistance	960 °C conforming to IEC 60695-2-1
Operating altitude	9842.52 ft (3000 m)



Ordering and shipping details

Category	22366 - MAN STR PROTECTORS-GV1/GV3
Discount Schedule	I11
GTIN	00785901590699
Nbr. of units in pkg.	1
Package weight(Lbs)	2.22 lb(US) (1.01 kg)
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.56 in (6.5 cm)
Package 1 width	5.71 in (14.5 cm)
Package 1 Length	6.30 in (16 cm)
Unit Type of Package 2	P06
Number of Units in Package 2	120
Package 2 Weight	295.33 lb(US) (133.96 kg)
Package 2 Height	29.53 in (75 cm)
Package 2 width	31.50 in (80 cm)
Package 2 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

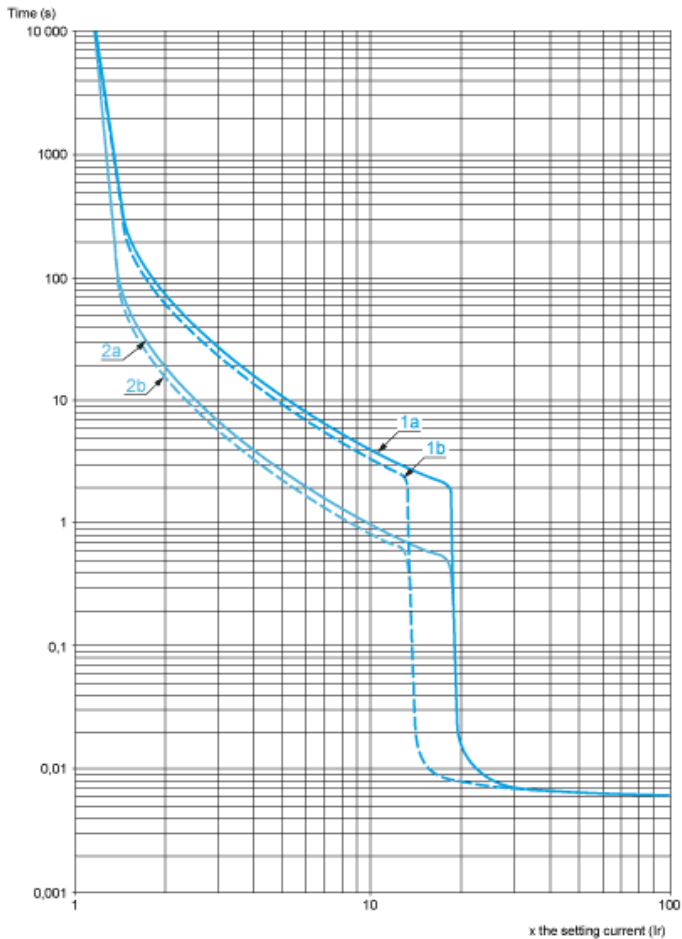
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	18 months
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Thermal-Magnetic Tripping Curves

Average Operating Times at 20 °C Related to Multiples of the Setting Current

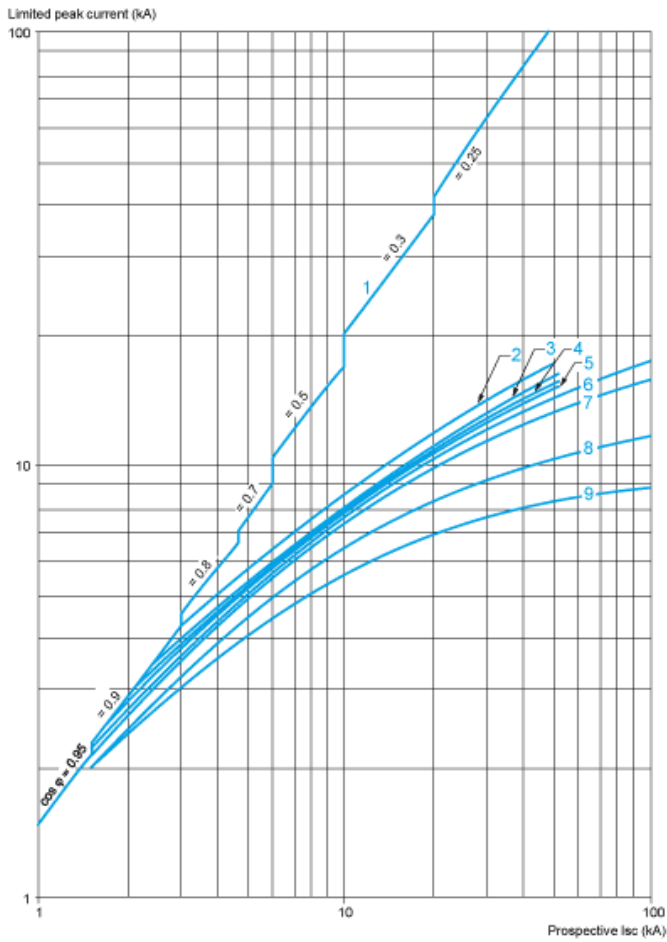


- 1a 3 poles from cold state (Ir minimum): GV3P
- 1b 3 poles from cold state (Ir maximum): GV3P
- 2a 3 poles from hot state (Ir minimum): GV3P
- 2b 3 poles from hot state (Ir maximum): GV3P

Current Limitation on Short-Circuit (3-Phase 400/415 V)

Dynamic Stress

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

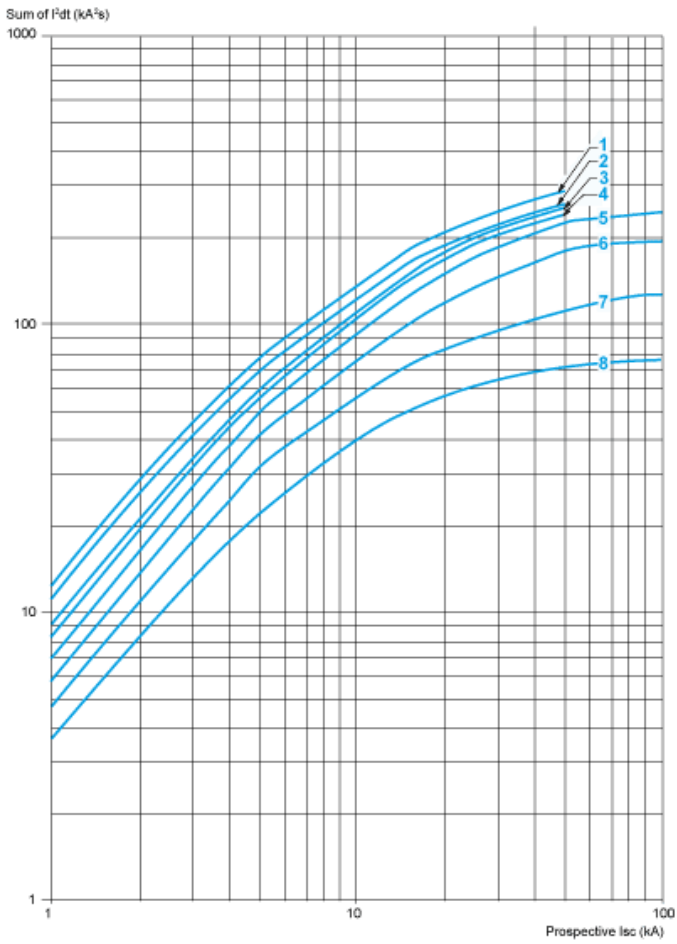


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

Maximum Thermal Limit on Short-Circuit

Thermal Limit in kA^2s in the Magnetic Operating Zone

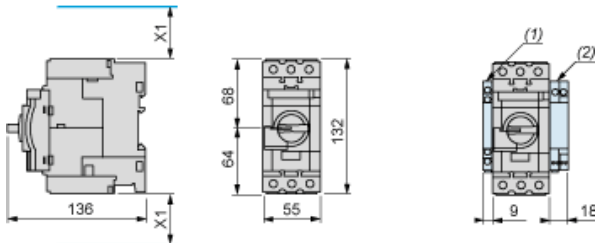
Sum of $I^2dt = f$ (prospective Isc) at $1.05 U_e = 435 \text{ V}$



- 1 70-80 (GV3P80) - 62-73 (GV3P73)
- 2 48-65 A (GV3P65)
- 3 37-50 A (GV3P50)
- 4 30-40 A (GV3P40)
- 5 23-32 A (GV3P32)
- 6 17-25 A (GV3P25)
- 7 12-18 A (GV3P18)
- 8 9-13 A (GV3P13)

GVI3L, GV3P

Dimensions



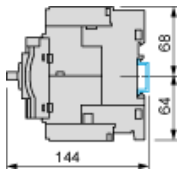
(1) Blocks GVAN.., GVAD.. and GVAM11.

(2) Blocks GV3AU.. and GV3AS..

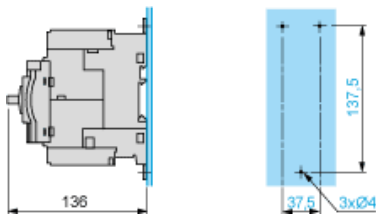
X1 = Electrical clearance (ISC max) 40 mm for $U_e \leq 500$ V, 50 mm for $U_e \leq 690$ V

NOTE: Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

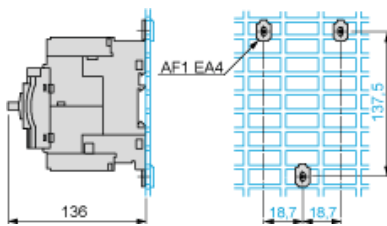
Mounting on Rail AM1 DE200 or AM1 ED201



Panel Mounting, using M4 Screws



Mounting on Pre-Slotted Plate AM1 PA



GV3P••

