

## GV3P50

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



### Main

Range	TeSys
Product name	TeSys GV3
Device short name	GV3P
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 3 x M4 screws)
Operating position	Any position
Motor power kW	22 kW at 400/415 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 45 kW at 690 V AC 50/60 Hz
Breaking capacity	50 kA Icu at 440 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 50 kA Icu at 400/415 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 12 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 60947-2 100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 50 % 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	Rotary knob
[In] rated current	50 A
Trip unit rating	37...50 A
Magnetic tripping current	700 A
System Voltage	690 V AC 50/60 Hz conforming to IEC 60947-2
[Uij] rated insulation voltage	690 V AC 50/60 Hz conforming to IEC 60947-2
[Ith] conventional free air thermal current	50 A conforming to IEC 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-2
Power dissipation per pole	8 W
Mechanical durability	50000 cycles
Electrical durability	50000 cycles AC-3 at 440 V In
Operating rate	25 cyc/h
Rated duty	Continuous conforming to IEC 60947-4-1
Connections - terminals	EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> solid EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> flexible without cable end EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> flexible with cable end
Tightening torque	5 N.m on EverLink BTR screw connectors for cable 25 mm <sup>2</sup>

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

	8 N.m on EverLink BTR screw connectors for cable 35 mm <sup>2</sup>
Suitability for isolation	Yes conforming to IEC 60947-1
Phase failure sensitivity	Yes conforming to IEC 60947-4-1
Height	5.2 in (132 mm)
Width	2.17 in (55 mm)
Depth	5.35 in (136 mm)
Product weight	2.12 lb(US) (0.96 kg)

## Environment

standards	EN/IEC 60947-1 EN/IEC 60947-2 EN/IEC 60947-4-1 UL 508 type E CSA C22.2 No 14-05 type E
product certifications	ATEX BV CCC CSA DNV GL LROS (pending) RINA UL EAC
protective treatment	TH
IP degree of protection	IP20 conforming to IEC 60529
IK degree of protection	IK09
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) conforming to IEC 60695-2-1
operating altitude	9842.52 ft (3000 m)

## Offer Sustainability

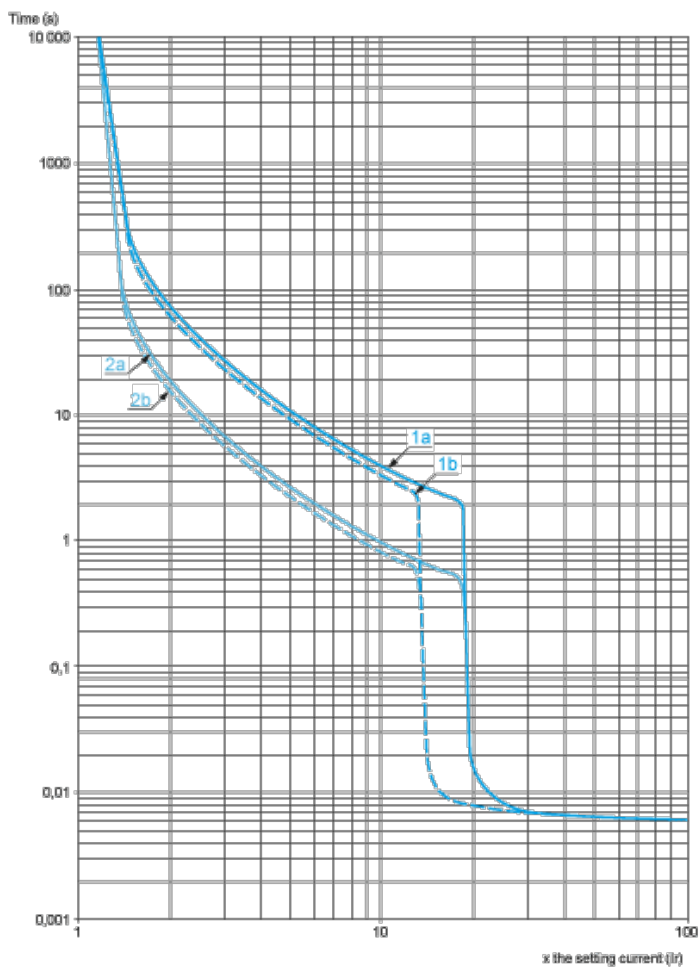
Green Premium product	Green Premium product
Compliant - since 0501 - Schneider Electric declaration of conformity	Compliant - since 0501 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.	Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.
For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>	For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

## Contractual warranty

Warranty period	18 months
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## Thermal-Magnetic Tripping Curves

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

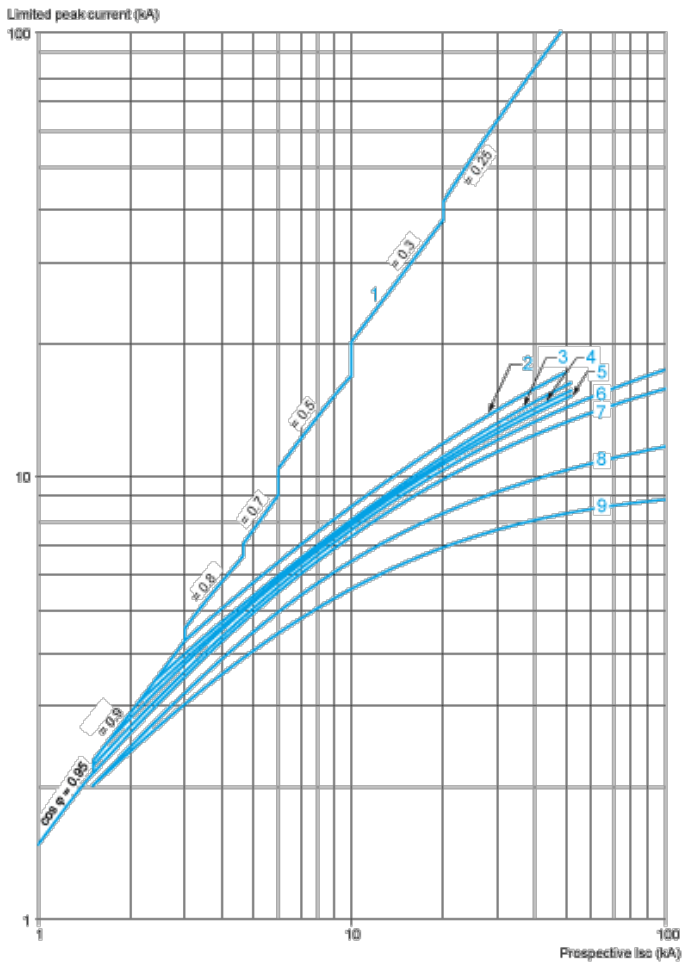


- 1a 3 poles from cold state (Ir minimum): GV3P
- 1b 3 poles from cold state (Ir maximum): GV3P
- 2a 3 poles from hot state (Ir minimum): GV3P
- 2b 3 poles from hot state (Ir maximum): GV3P

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

#### Dynamic Stress

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

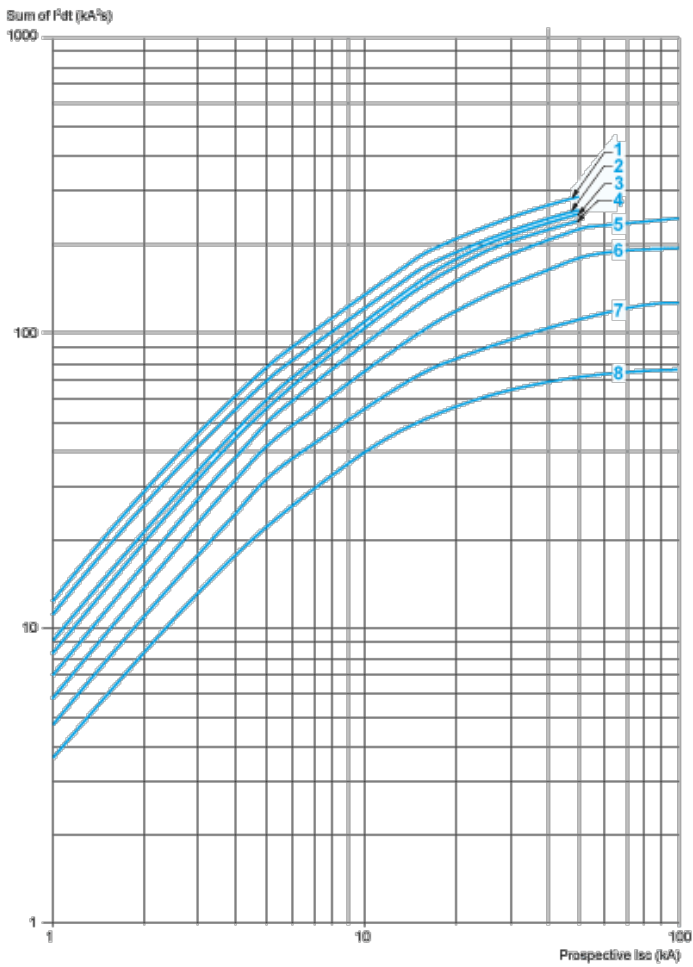


- 1 Maximum peak current
- 2 70-80 A (GV3P80), 62-73 A (GV3P73)
- 3 48-65 A (GV3P65)
- 4 37-50 A (GV3P50)
- 5 30-40 A (GV3P40)
- 6 23-32 A (GV3P32)
- 7 17-25 A (GV3P25)
- 8 12-18 A (GV3P18)
- 9 9-13 A (GV3P13)

#### Maximum Thermal Limit on Short-Circuit

#### Thermal Limit in kA<sup>2</sup>s in the Magnetic Operating Zone

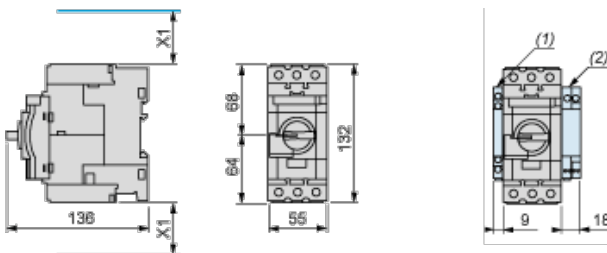
Sum of  $I^2dt = f$  (prospective Isc) at 1.05 Ue = 435 V



- 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)

### GV13L, GV3P

#### Dimensions



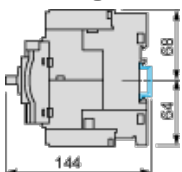
(1) Blocks GVAN<sub>..</sub>, GVAD<sub>..</sub> and GVAM11.

(2) Blocks GV3AU<sub>..</sub> and GV3AS<sub>..</sub>.

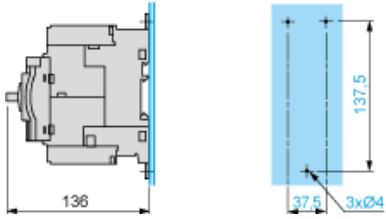
X1 = Electrical clearance (ISC max) 40 mm for  $U_e \leq 500$  V, 50 mm for  $U_e \leq 690$  V

**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.

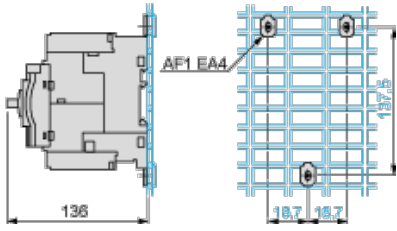
#### Mounting on Rail AM1 DE200 or AM1 ED201



### Panel Mounting, using M4 Screws



### Mounting on Pre-Slotted Plate AM1 PA



### GV3P\*\*

