

# GV2P21

TeSys GV2 - Motor circuit breaker - thermal-magnetic - 17...23 A



## Main

Range	TeSys
Product name	TeSys GV2
Device short name	GV2P
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 2 x M4 screws)
Operating position	Any position
Motor power kW	11 kW at 500 V AC 50/60 Hz 9 kW at 400/415 V AC 50/60 Hz 18.5 kW at 690 V AC 50/60 Hz
Breaking capacity	10 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 20 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 4 kA Icu at 690 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
[Ics] rated service short-circuit breaking capacity	100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 690 V AC 50/60 Hz conforming to IEC 60947-2 50 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 500 V AC 50/60 Hz conforming to IEC 60947-2
Control type	Rotary knob
[In] rated current	23 A
Trip unit rating	17...23 A
Magnetic tripping current	327 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	23 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
Connections - terminals	Screw clamp terminals 2 cable(s) 1...6 mm <sup>2</sup> solid Screw clamp terminals 2 cable(s) 1.5...6 mm <sup>2</sup> flexible without cable end

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.

Screw clamp terminals 2 cable(s) 1...4 mm<sup>2</sup> flexible with cable end

Tightening torque	1.7 N.m on screw clamp terminals
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	97 mm

## 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 CSA DNV EZU GL LROS (Lloyds register of shipping) RINA TSE UL UL 508 type E 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 0631 - 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

### 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 GV2P

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

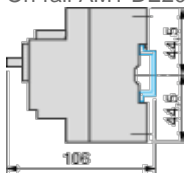
Sum of  $I^2dt = f$  (prospective  $I_{sc}$ ) at  $1.05 U_e = 435 V$



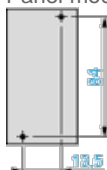
- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
- 7 4-6.3 A
- 8 2.5-4 A
- 9 1.6-2.5 A
- 10 1-1.6 A

**GV2P**

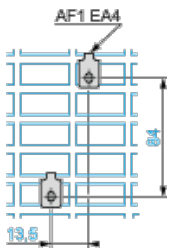
On rail AM1 DE200, ED200 (35 x 15)



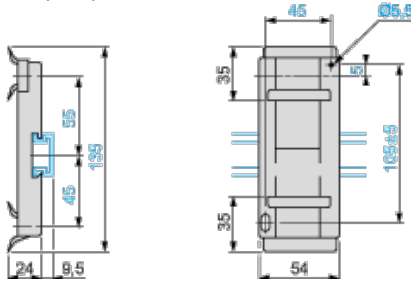
Panel mounted



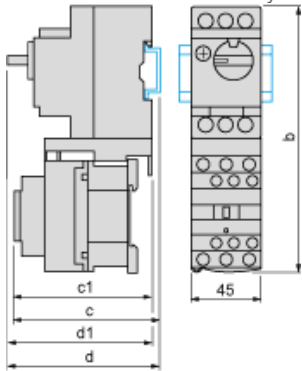
On pre-slotted plate AM1 PA



Adapter plate GK2AF01



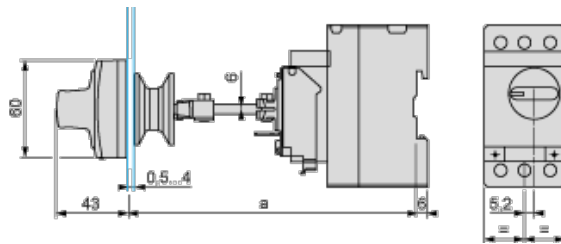
Combination GV2P + TeSys d contactor



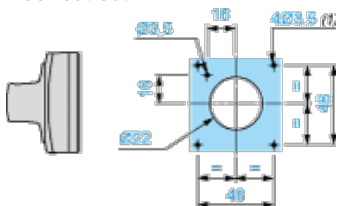
GV2P +	LC1D09...D18	LC1D25 and D32
b	176.4	186.8
c1	100.1	106.4
c	105.6	111.9
d1	95	95
d	100.5	100.5

**Mounting**

**Mounting of External Operator GV2APN01, GV2APN02 or GV2APN04 for Motor Circuit Breakers GV2P**



**Door cut-out**



(1) For IP65 only.

**Mounting of External Operator GVAPH02 for Motor Circuit Breakers GV2P**



	a		b	
	Minimum	Maximum	Minimum	Maximum
GV2APN..	140	250	–	–
GV2APN.. + GVAPH02	–	–	151	250
GV2APN.. + GVAPK11	250	434	–	–
GV2APN.. + GVAPH02 + GVAPK11	–	–	250	445

Door cut-out



(1) For IP65 only.

GV2P..

