

# Product data sheet

Specifications



Motor circuit breaker, TeSys Deca, 3P, 17-23A, thermal magnetic, screw clamp terminals, rotary handle

GV2P21

## Main

Range of product	TeSys GV2
Range	TeSys Deca TeSys Deca
Device short name	GV2P
Product name	TeSys GV2 TeSys Deca
Product or component type	Motor circuit breaker
Device application	Motor protection
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 2 x M4 screws)
Operating position	Any position
Motor power kW	9 kW at 400/415 V AC 50/60 Hz 11 kW at 500 V AC 50/60 Hz 18.5 kW at 690 V AC 50/60 Hz
Breaking capacity	100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 500 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 20 kA Icu at 440 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 690 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2 75 % at 500 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
Control type	Rotary handle
[In] rated current	23 A
Thermal protection adjustment range	17...23 A
Magnetic tripping current	327 A

<b>[Ue] rated operational voltage</b>	690 V AC 50/60 Hz conforming to IEC 60947-2
<b>[Ui] rated insulation voltage</b>	690 V AC 50/60 Hz conforming to IEC 60947-2
<b>[Ith] conventional free air thermal current</b>	23 A conforming to IEC 60947-4-1
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947-2
<b>Power dissipation per pole</b>	2.5 W
<b>Mechanical durability</b>	100000 cycles
<b>Electrical durability</b>	100000 cycles for AC-3 at 415 V at 415 V
<b>Maximum operating rate</b>	25 cyc/h
<b>Rated duty</b>	Continuous conforming to IEC 60947-4-1
<b>Tightening torque</b>	1.7 N.m on screw clamp terminals
<b>Mechanical robustness</b>	Shocks: 30 Gn conforming to IEC 60068-2-27 Vibrations: 5 Gn, 5...150 Hz conforming to IEC 60068-2-6
<b>Phase failure sensitivity</b>	Yes conforming to IEC 60947-4-1
<b>Height</b>	89 mm
<b>Width</b>	45 mm
<b>Depth</b>	97 mm
<b>Colour</b>	Dark grey
<b>Suitability for isolation</b>	Yes conforming to IEC 60947-1 § 7-1-6

## Environment

<b>Standards</b>	EN/IEC 60947-2 EN/IEC 60947-4-1
<b>Product certifications</b>	CCC UL CSA EAC ATEX BV LRQS (Lloyds register of shipping) UKCA DNV-GL RINA
<b>Climatic withstand</b>	conforming to IACS E10
<b>IK degree of protection</b>	IK04
<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>Ambient air temperature for storage</b>	-40...80 °C
<b>Fire resistance</b>	960 °C conforming to IEC 60695-2-11
<b>Operating altitude</b>	2000 m
<b>Ambient air temperature for operation</b>	-20...60 °C

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	338 g
<b>Package 1 Height</b>	9.3 cm
<b>Package 1 width</b>	4.8 cm
<b>Package 1 Length</b>	10 cm

Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Weight	7.094 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Weight	123.94 kg
Package 3 Height	75 cm
Package 3 width	60 cm
Package 3 Length	80 cm

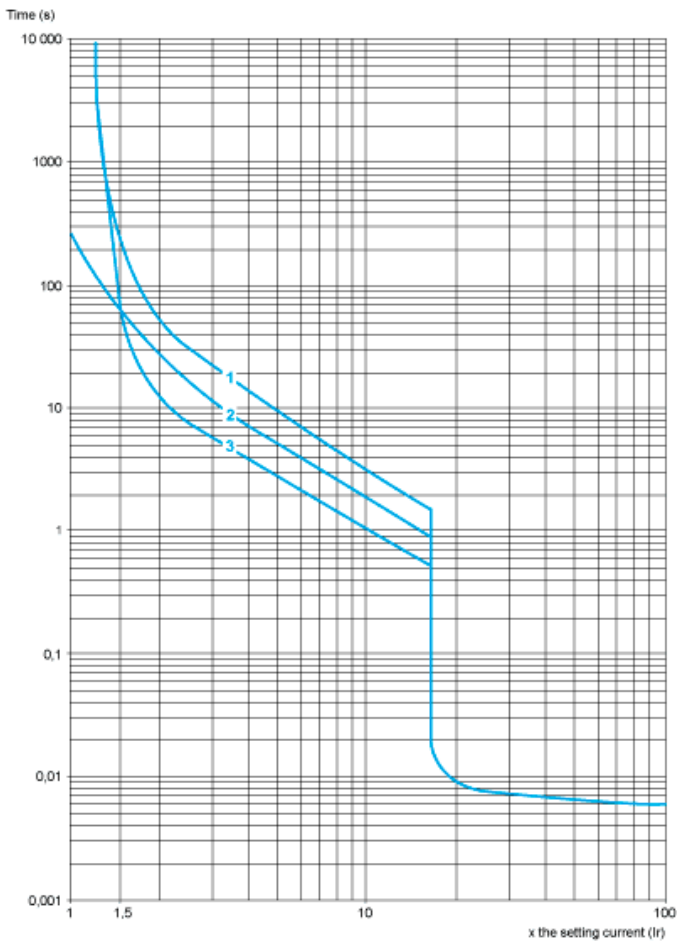
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## 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

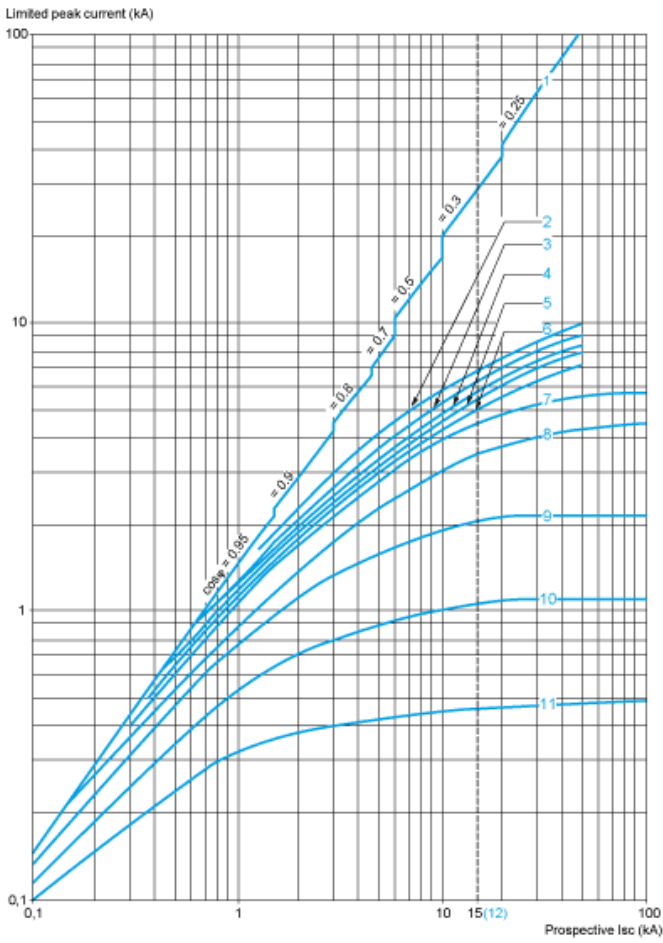


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

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

**Dynamic Stress**

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

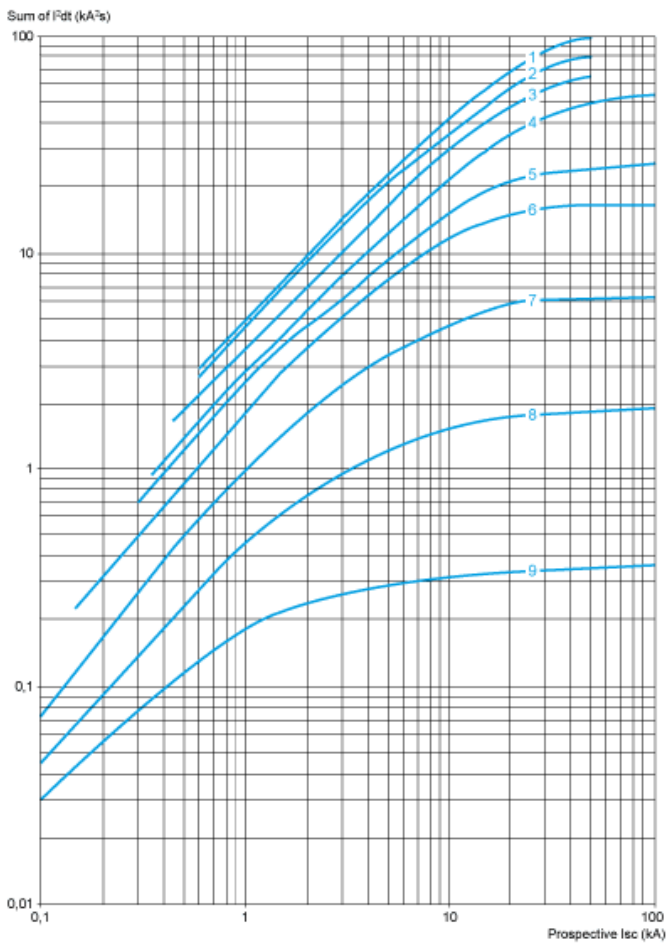


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2P

Thermal Limit in  $\text{kA}^2\text{s}$  in the Magnetic Operating Zone

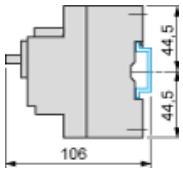
Sum of  $I^2dt = f(\text{prospective Isc})$  at  $1.05 U_e = 435 \text{ V}$



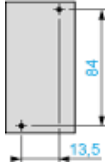
- 1      24-32 A
- 2      20-25 A
- 3      17-23 A
- 4      13-18 A
- 5      9-14 A
- 6      6-10 A
- 7      4-6.3 A
- 8      2.5-4 A
- 9      1.6-2.5 A
- 10     1-1.6 A

**GV2P**

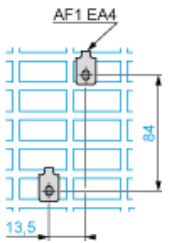
On rail AM1 DE200, ED200 (35 x 15)



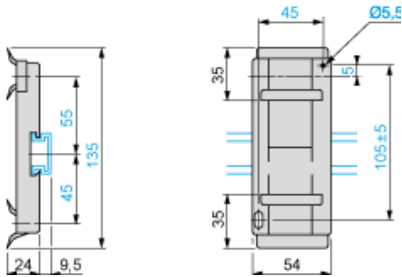
Panel mounted



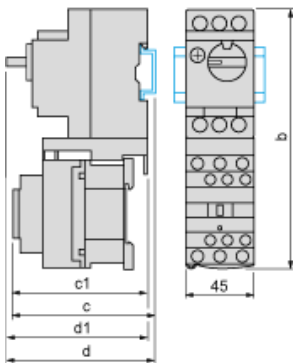
On pre-slotted plate AM1 PA



Adapter plate GK2AF01



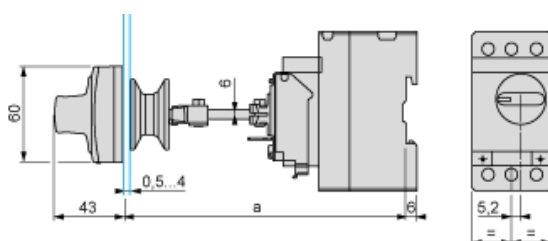
Combination GV2P + TeSys d contactor



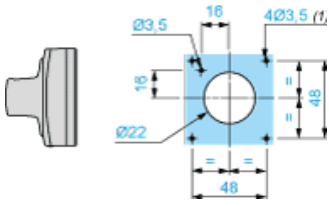
GV2P +	LC1D09...D18	LC1D25 and D32
b	176.4	186.8
c1	100.1	106.4
c	105.6	111.9
d1	95	95
d	100.5	100.5

**Mounting**

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

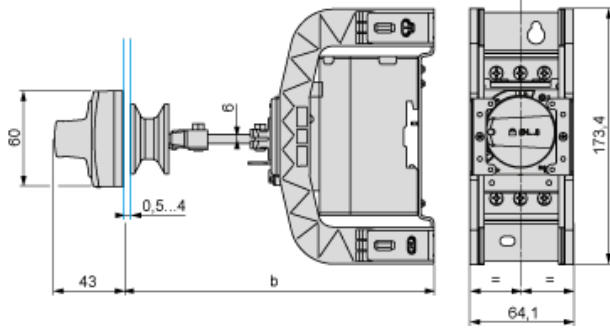


Door cut-out



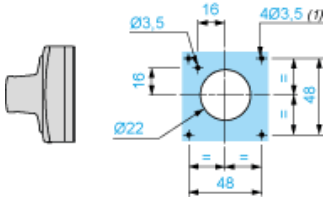
(1) For IP65 only.

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••

