

## Product data sheet

### Characteristics

# GV2P20

Motor circuit breaker, TeSys  
Deca, 3P, 13-18A, thermal magnetic, screw  
clamp terminals, rotary handle



### 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	7.5 kW at 400/415 V AC 50/60 Hz 9 kW at 500 V AC 50/60 Hz 15 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	18 A
Thermal protection adjustment range	13...18 A
Magnetic tripping current	223 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	18 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 415 V At 415 V
Maximum operating rate	25 cyc/h

Rated duty	Continuous conforming to IEC 60947-4-1
Tightening torque	1.7 N.m on screw clamp terminals
Mechanical robustness	Shocks: 30 Gn conforming to IEC 60068-2-27 Vibrations: 5 Gn, 5...150 Hz conforming to IEC 60068-2-6
Phase failure sensitivity	Yes conforming to IEC 60947-4-1
Height	89 mm
Width	45 mm
Depth	97 mm
Colour	Dark grey
Suitability for isolation	Yes conforming to IEC 60947-1 § 7-1-6

## Environment

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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	336.1 g
Package 1 Height	4.8 cm
Package 1 width	9.3 cm
Package 1 Length	10.0 cm
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Weight	6.983 kg
Package 2 Height	15.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Weight	119.72 kg
Package 3 Height	75.0 cm
Package 3 width	80.0 cm
Package 3 Length	60.0 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>
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

## 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

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

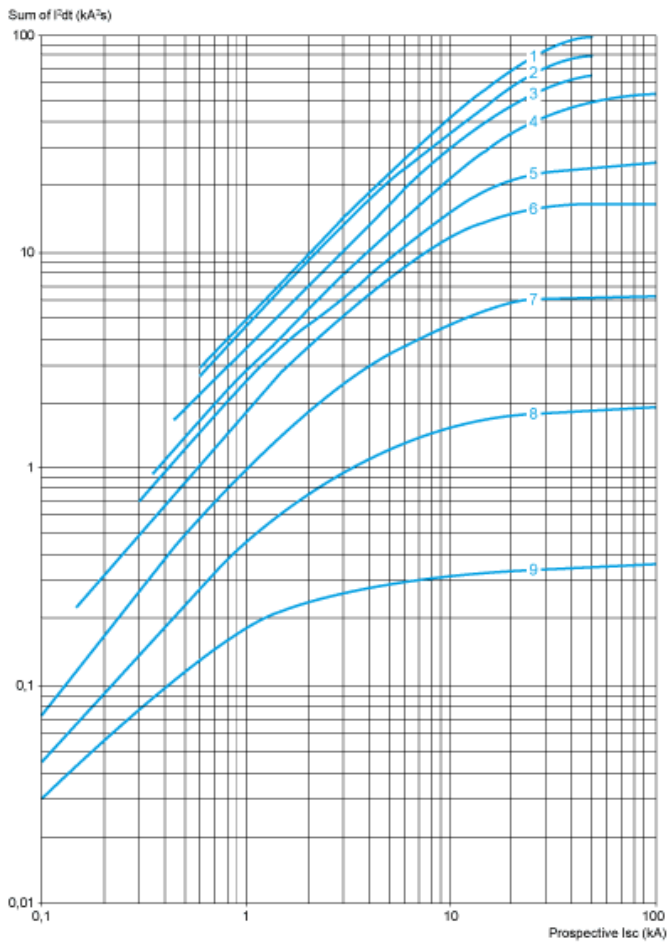


- 1 Maximum peak current
- 2 24-32 A
- 3 20-25 A
- 4 17-23 A
- 5 13-18 A
- 6 9-14 A
- 7 6-10 A
- 8 4-6.3 A
- 9 2.5-4 A
- 10 1.6-2.5 A
- 11 1-1.6 A
- 12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

### Thermal Limit on Short-Circuit for GV2P

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

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



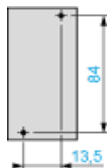
- 1 24-32 A
- 2 20-25 A
- 3 17-23 A
- 4 13-18 A
- 5 9-14 A
- 6 6-10 A
- 7 4-6.3 A
- 8 2.5-4 A
- 9 1.6-2.5 A
- 10 1-1.6 A

GV2P

On rail AM1 DE200, ED200 (35 x 15)



Panel mounted



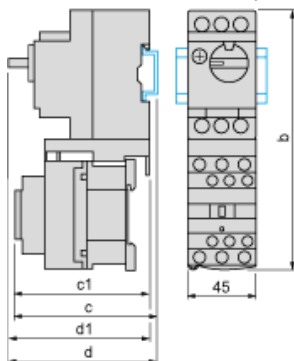
On pre-slotted plate AM1 PA



Adapter plate GK2AF01



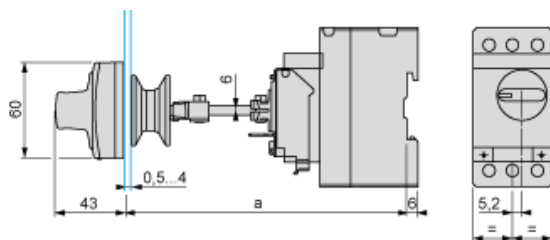
Combination GV2P + TeSys d contactor



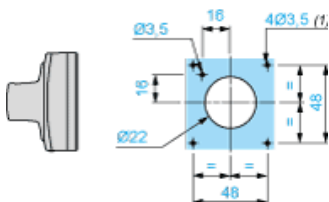
GV2P +	LC1D09...D18	LC1D25 and D32
b	176.4	186.8
c1	100.1	106.4
c	105.6	111.9
d1	95	95
d	100.5	100.5

## Mounting

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

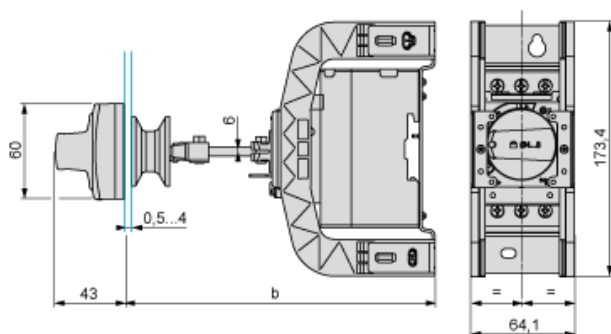


Door cut-out



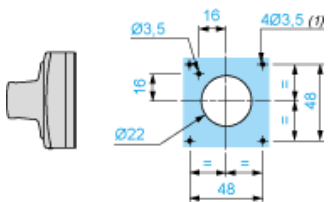
(1) For IP65 only.

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••

