

# Product datasheet

Specifications



## TeSys GV7 - circuit breaker - 3P - AC-3 - 90...150 A - thermal-magnetic

GV7RS150

⚠ Discontinued

### Main

Range	TeSys
Product name	TeSys GV7
Product or component type	Circuit breaker
Device short name	GV7R
Device application	Motor
Poles description	3P
Network type	AC
Utilisation category	AC-3 conforming to IEC 60947-4-1
Network frequency	50/60 Hz conforming to IEC 60947-4-1
Breaking capacity	50 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 65 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 70 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
[Ics] rated service short-circuit breaking capacity	100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
thermal protection adjustment range	90...150 A
Trip unit technology	Thermal-magnetic

### Complementary

Mounting mode	By clips By screws
Mounting support	Flush Rail Panel mounting Kit for fixing the switchgear
Mounting position	Vertical
Motor power kW	110 kW at 660...690 V AC 50/60 Hz 55 kW at 400...415 V AC 50/60 Hz 75 kW at 400...415 V AC 50/60 Hz 75 kW at 500 V AC 50/60 Hz 90 kW at 500 V AC 50/60 Hz 90 kW at 660...690 V AC 50/60 Hz
control type	Rocker lever
[Ue] rated operational voltage	690 V AC 50/60 Hz conforming to IEC 60947-2

<b>[Ui] rated insulation voltage</b>	750 V AC 50/60 Hz conforming to IEC 60947-2
<b>[Ith] conventional free air thermal current</b>	150 A conforming to IEC 60947-4-1
<b>[Ui<sub>imp</sub>] rated impulse withstand voltage</b>	8 kV conforming to IEC 60947-2
<b>power dissipation per pole</b>	8.7 W
<b>Power dissipation per pole</b>	8.7 W
<b>Mechanical durability</b>	40000 cycles
<b>Electrical durability</b>	20000 cycles for AC-3 at 440 V In 40000 cycles for AC-3 at 440 V In/2
<b>maximum operating rate</b>	25 cyc/h
<b>Rated duty</b>	Continuous conforming to IEC 60947-4-1
<b>Connection pitch</b>	35 mm without spreaders 45 mm with spreaders
<b>Connections - terminals</b>	Bars Cable with lug - external diameter: 10 mm Screw Bare cable connectors 1.5...95 mm <sup>2</sup>
<b>Tightening torque</b>	10 N.m on screw M6 screw type 15 N.m on bare cable connectors for cable 1.5...95 mm <sup>2</sup>
<b>Mechanical robustness</b>	Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations: 2.5 Gn, 0...25 Hz conforming to IEC 60068-2-6
<b>Suitability for isolation</b>	Yes conforming to IEC 60947-1
<b>Phase failure sensitivity</b>	Yes conforming to IEC 60947-4-1 § 7-2-1-5-2
<b>Height</b>	161 mm
<b>Width</b>	105 mm
<b>Depth</b>	111 mm
<b>Net weight</b>	2.02 kg

## Environment

<b>Standards</b>	NF C 63-650 EN/IEC 60947-2 NF C 63-120 EN/IEC 60947-4-1 VDE 0113 NF C 79-130 VDE 0660 EN/IEC 60947-1
<b>Product certifications</b>	UL DNV
<b>Protective treatment</b>	TC
<b>IP degree of protection</b>	IP405 conforming to IEC 60529 (with terminal shrouds)
<b>Pollution degree</b>	3
<b>Ambient air temperature for operation</b>	-25...70 °C
<b>Ambient air temperature for storage</b>	-55...95 °C
<b>Fire resistance</b>	960 °C conforming to IEC 60695-2-1
<b>Operating altitude</b>	2000 m

## Packing Units

<b>Unit Type of Package 1</b>	PCE
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Number of Units in Package 1	1
Package 1 Height	11 cm
Package 1 Width	14 cm
Package 1 Length	17.5 cm
Package 1 Weight	1.958 kg

## **Contractual warranty**

Warranty (in months)	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Better

#### Materials and Substances

EU RoHS Directive

Not applicable, out of EU RoHS legal scope

### Use Again

#### Repack and remanufacture

WEEE Label

 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

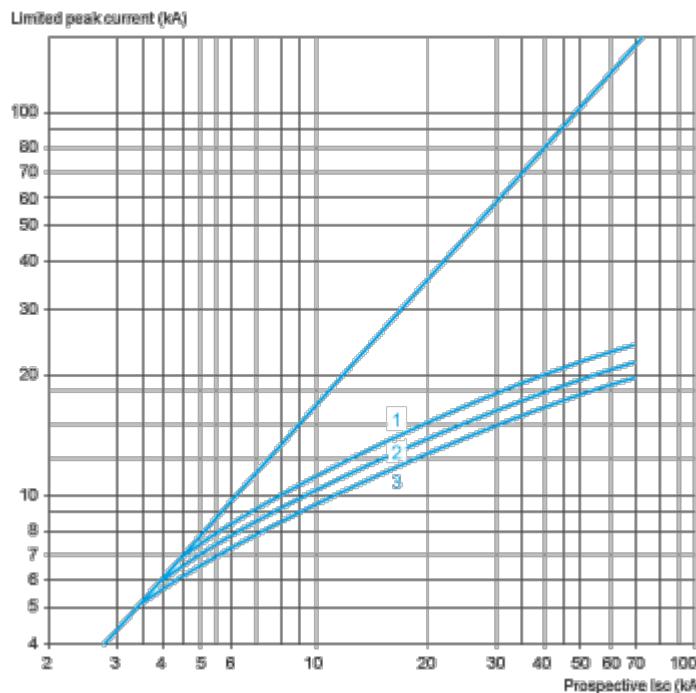
## Performance Curves

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

## Dynamic Stress

 $I_{peak} = f(\text{prospective } I_{sc})$ 

For GV7RS only



1 GV7RS220

2 GV7RS150

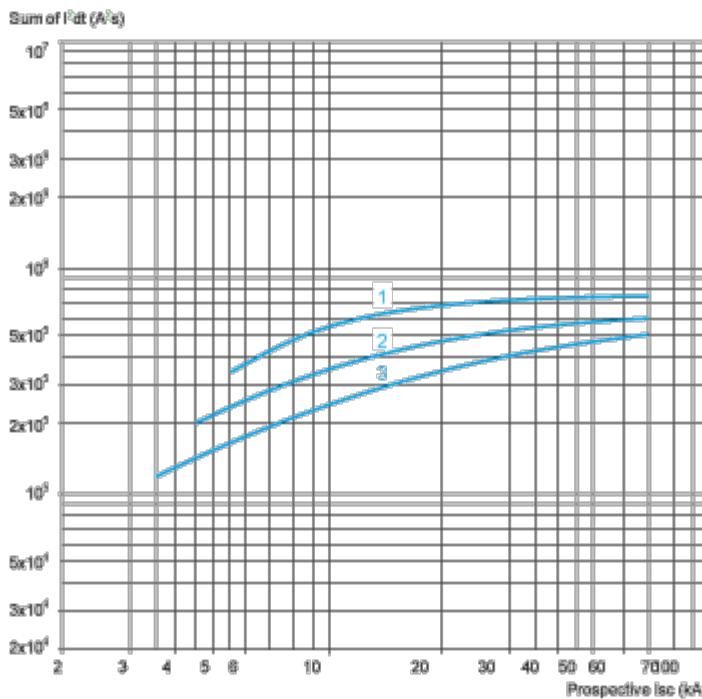
3 GV7RS100

## Thermal Limit (3-Phase 400/415 V)

## Thermal Limit

 $\text{Sum of } I^2 dt = f(\text{prospective } I_{sc})$ 

For GV7RS only



1 GV7RS220

2 GV7RS150

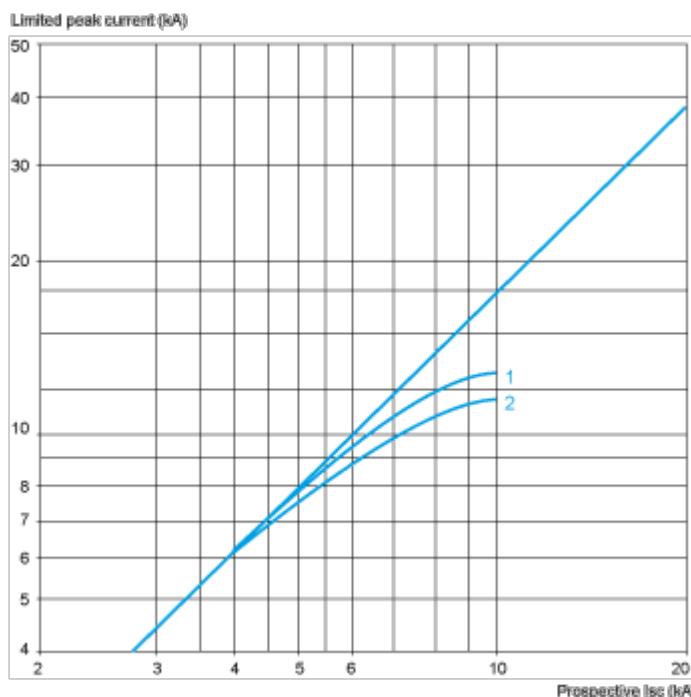
3 GV7RS100

### Current Limitation on Short-Circuit (3-Phase 690 V)

#### Dynamic Stress

I peak = f (prospective Isc)

For GV7RS only

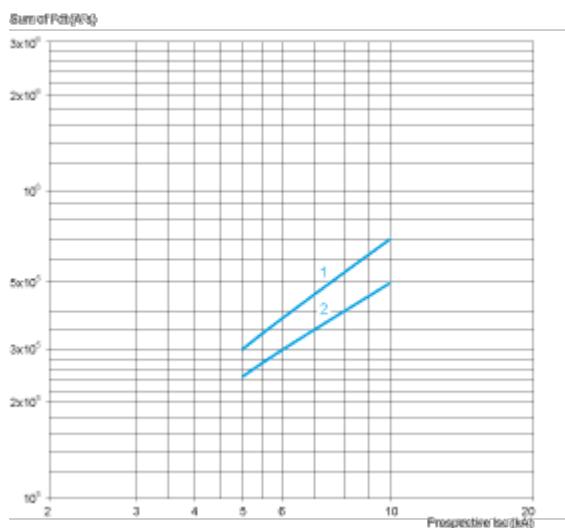


1 GV7RS220

2 GV7RS150 and GV7RS100

**Thermal Limit on Short-Circuit (3-Phase 690 V)****Thermal Limit**Sum of  $I^2 dt = f$  (prospective Isc)

For GV7RS only



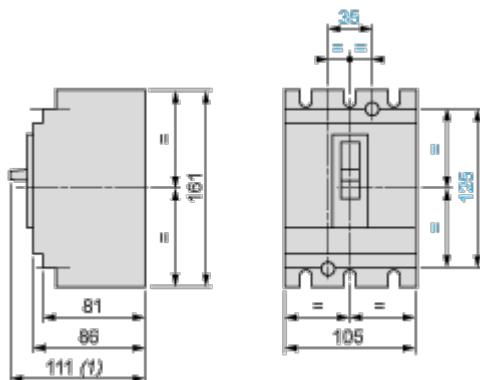
1 GV7RS220

2 GV7RS150 and GV7RS100

## Dimensions Drawings

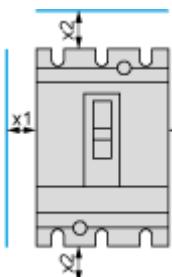
## GV7R

## Dimensions



(1) 126 for GV7R\_220.

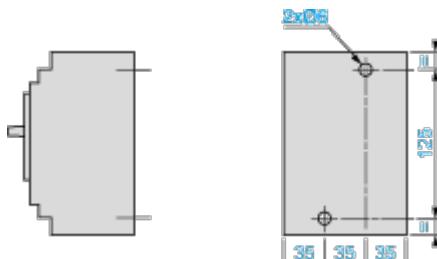
## Minimum Electrical Clearance



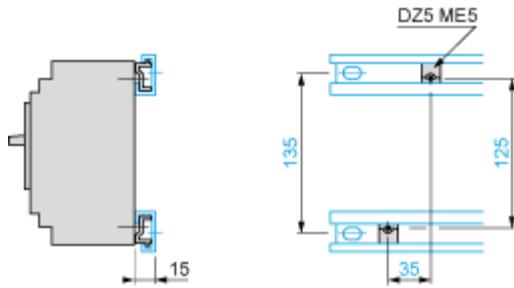
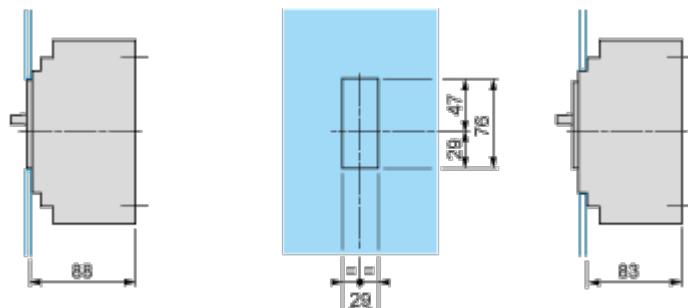
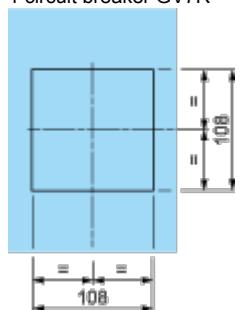
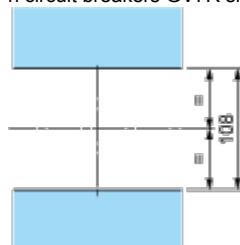
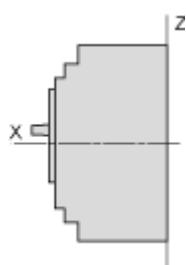
		x1	x2
Painted or insulated metal plate, insulation or insulated bar		0	30
Bare metal plate	$U \leq 440 \text{ V}$	5	35
	$440 \text{ V} < U < 600 \text{ V}$	10	35
	$U \geq 600 \text{ V}$	20	35

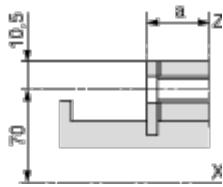
## GV7R

## Panel Mounting



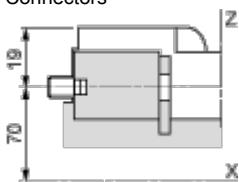
## Mounting on 2 Mounting Rails DZ5 MB201

**Flush-Mounting****1 circuit breaker GV7R****n circuit breakers GV7R side by side****Connection****Smooth terminals**



	a
GV7R <sub>•</sub> 40...R <sub>•</sub> 150	19.5
GV7R <sub>•</sub> 220	21.5

## Connectors



## Connections and Schema

**Motor Circuit Breakers**

GV7 R

