

# Product datasheet

Specifications



## TeSys GV7 - circuit breaker - 3P - AC-3 - 60...100 A - thermal-magnetic

GV7RS100

ⓘ 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	60...100 A
Trip unit technology	Thermal-magnetic

### Complementary

mounting mode	By screws By clips
mounting support	Kit for fixing the switchgear Rail Flush Panel mounting
Mounting position	Vertical
Motor power kW	45 kW at 400...415 V AC 50/60 Hz 75 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
[Ui] rated insulation voltage	750 V AC 50/60 Hz conforming to IEC 60947-2
[Ith] conventional free air thermal current	100 A conforming to IEC 60947-4-1

<b>[Uimp] rated impulse withstand voltage</b>	8 kV conforming to IEC 60947-2
<b>power dissipation per pole</b>	5 W
<b>Power dissipation per pole</b>	5 W
<b>Mechanical durability</b>	50000 cycles
<b>Electrical durability</b>	30000 cycles for AC-3 at 440 V In 50000 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>	2.04 kg

## Environment

<b>Standards</b>	NF C 63-120 EN/IEC 60947-2 NF C 63-650 VDE 0113 EN/IEC 60947-1 VDE 0660 NF C 79-130 EN/IEC 60947-4-1
<b>Product certifications</b>	DNV UL
<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
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	11.5 cm

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Package 1 Width	14 cm
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Package 1 Length	17 cm
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Package 1 Weight	1.93 kg
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## Contractual warranty

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Warranty	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

**Eu Rohs Directive**

Not applicable, out of EU RoHS legal scope

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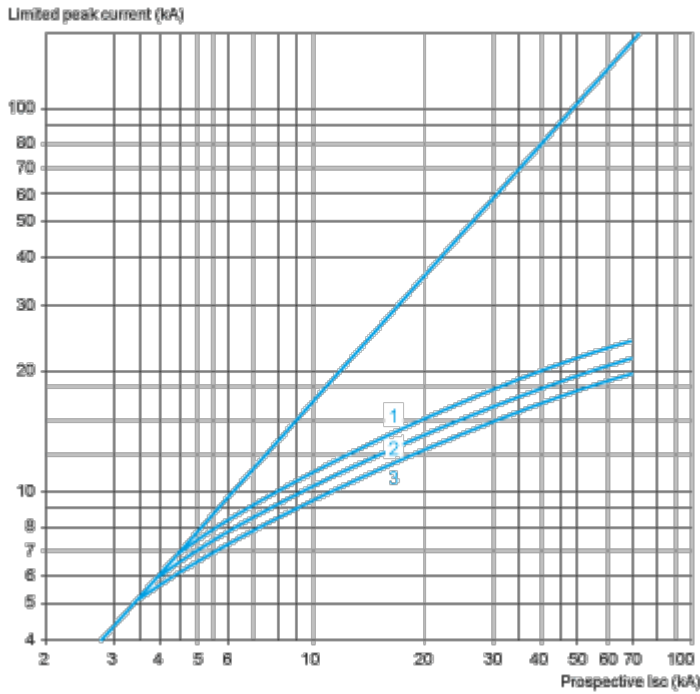
Performance Curves

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

**Dynamic Stress**

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

For GV7RS only



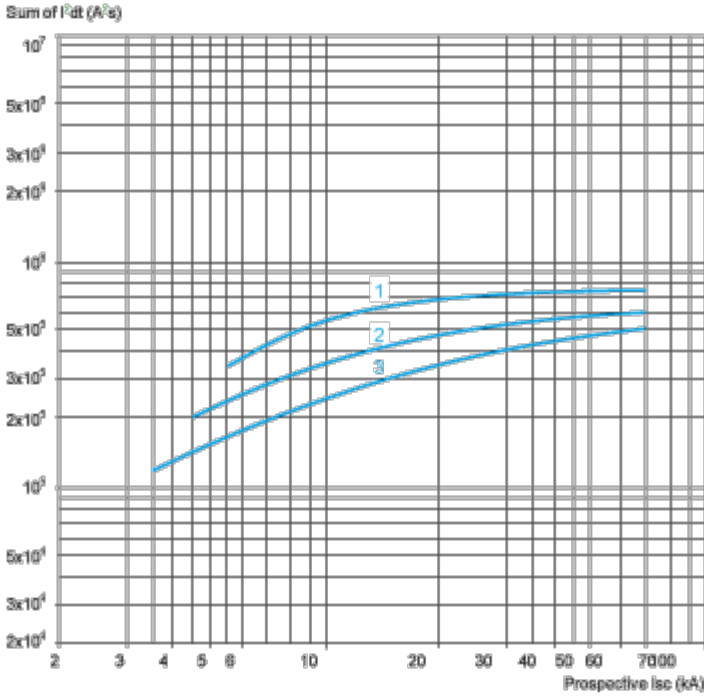
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

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

**Thermal Limit**

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

For GV7RS only



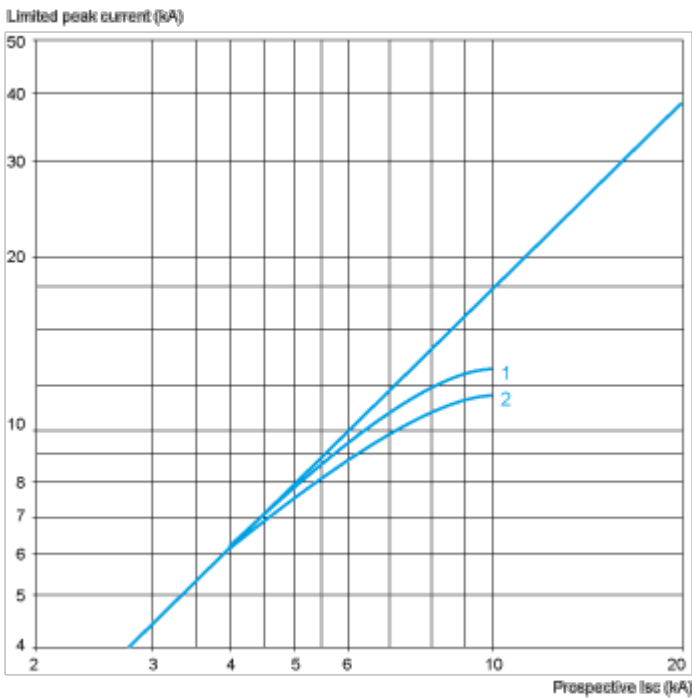
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

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

**Dynamic Stress**

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

For GV7RS only



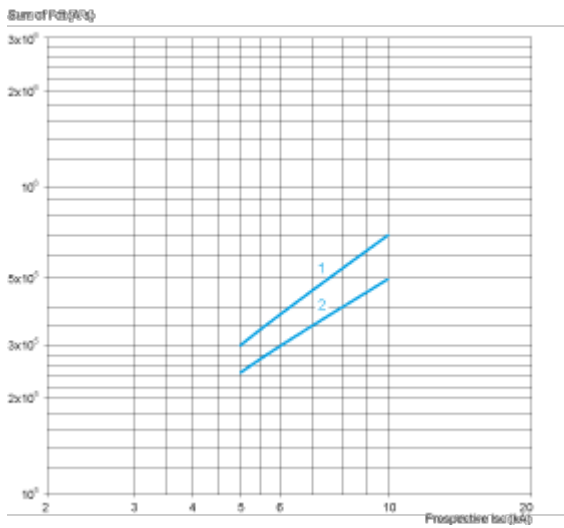
- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

**Thermal Limit on Short-Circuit (3-Phase 690 V)**

**Thermal Limit**

Sum of  $I^2dt = f$  (prospective Isc)

For GV7RS only

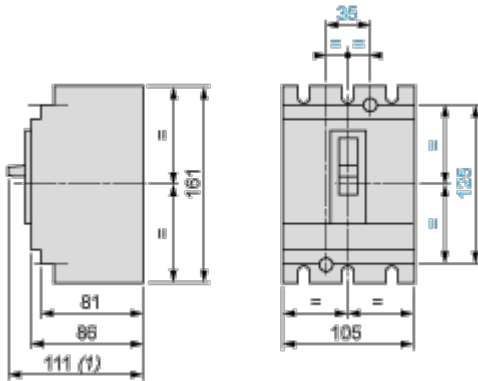


- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

Dimensions Drawings

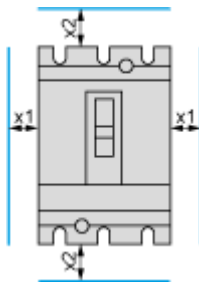
GV7R

Dimensions



(1) 126 for GV7R\_220.

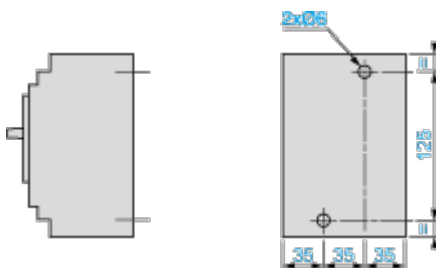
Minimum Electrical Clearance



		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

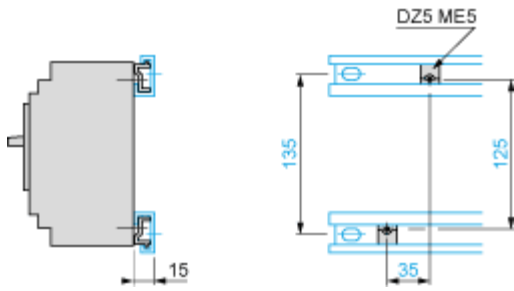
GV7R

Panel Mounting

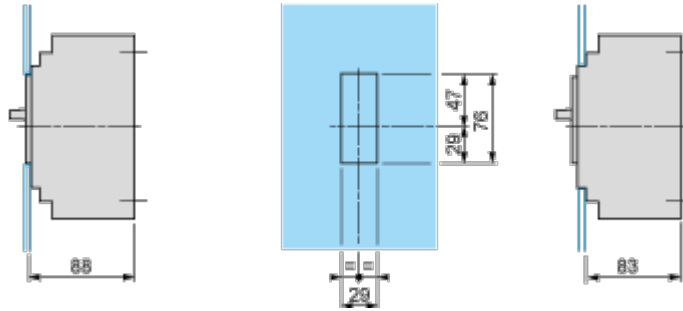


Mounting on 2 Mounting Rails DZ5 MB201

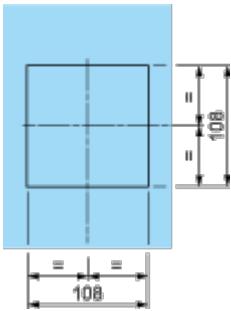




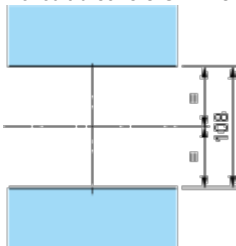
Flush-Mounting



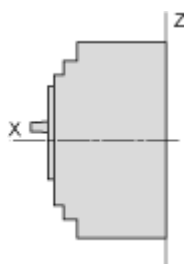
1 circuit breaker GV7R



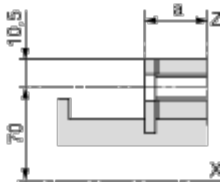
n circuit breakers GV7R side by side



Connection

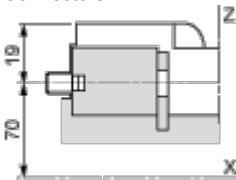


Smooth terminals



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

Connectors



Connections and Schema

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Motor Circuit Breakers  
GV7 R

