

# Product datasheet

Specifications



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

GV7RE100

⚠ Discontinued on: 23 Jan 2021

⚠ 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	35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 25 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 8 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 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 50 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 50 % 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	Flush Rail Kit for fixing the switchgear 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

Disclaimer: 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

<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 mm²
<b>Tightening Torque</b>	10 N.m on screw M6 screw type 15 N.m on bare cable connectors for cable 1.5...95 mm²
<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 VDE 0660 NF C 63-650 EN/IEC 60947-1 EN/IEC 60947-4-1 EN/IEC 60947-2 VDE 0113 NF C 79-130
<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

Package 1 Width	14 cm
Package 1 Length	17.5 cm
Package 1 Weight	1.928 kg

## Contractual warranty

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 >](#)



Transparency

Eu Rohs Directive	Not applicable, out of EU RoHS legal scope
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

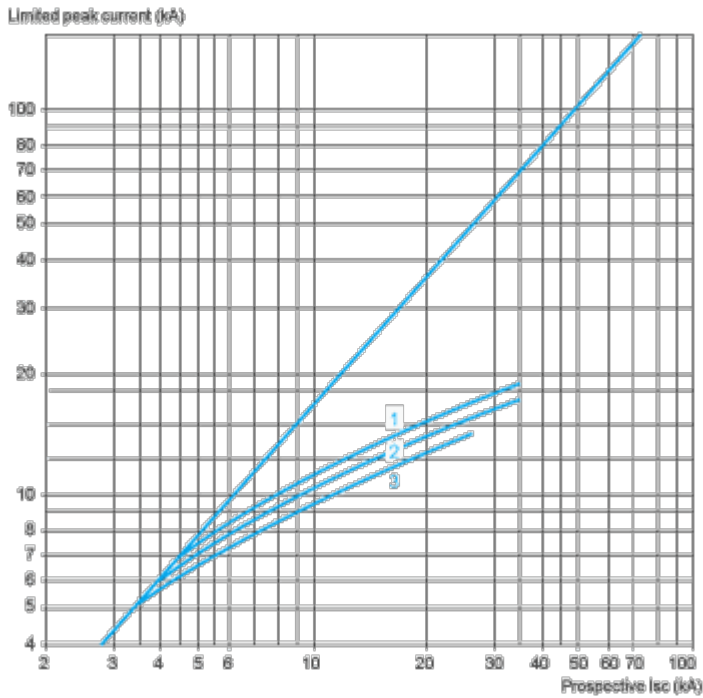
Performance Curves

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

Dynamic Stress

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

For GV7RE only



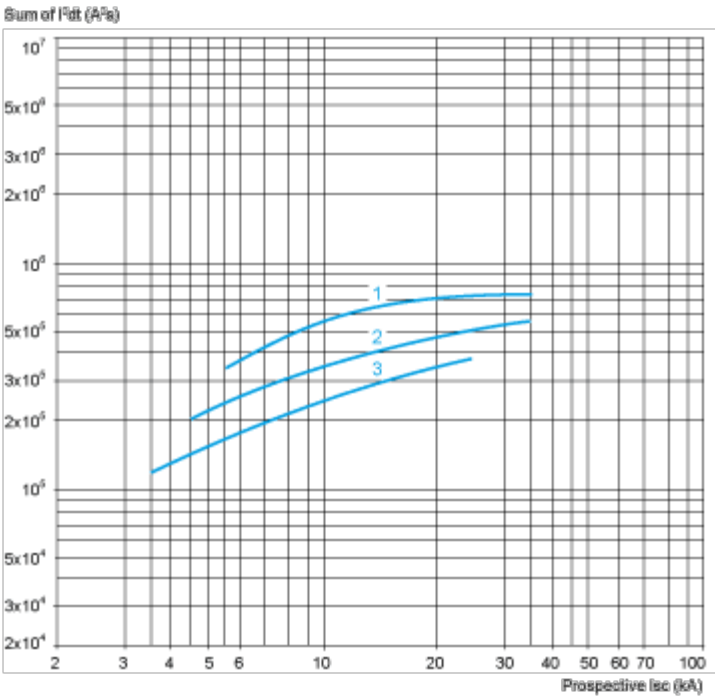
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

Thermal Limit (3-Phase 400/415 V)

Thermal Limit

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

For GV7RE only



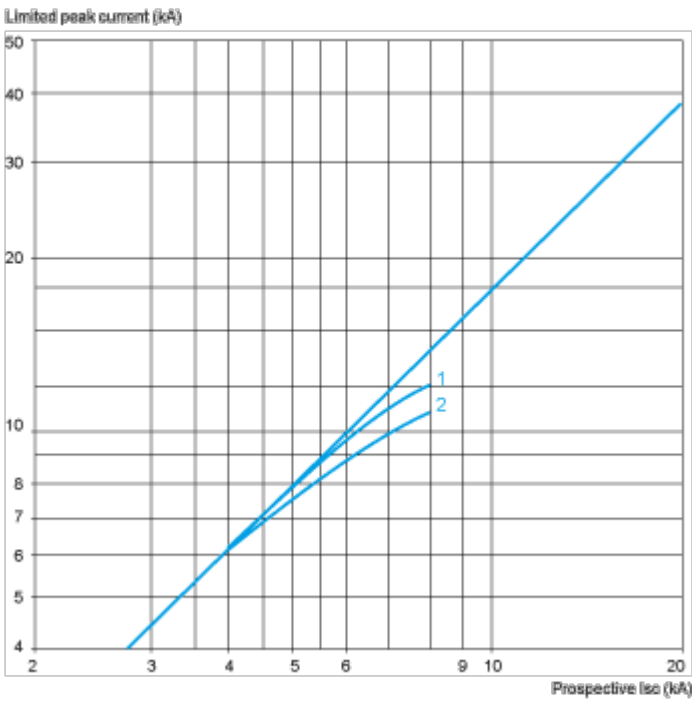
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

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

Dynamic Stress

I<sub>peak</sub> = f (prospective I<sub>sc</sub>)

For GV7RE only



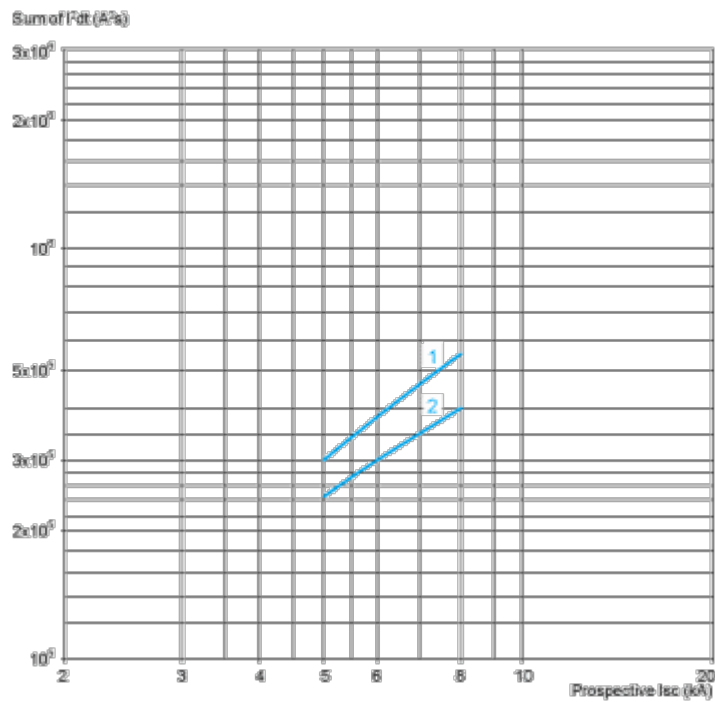
- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

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

Thermal Limit

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

For GV7RE only

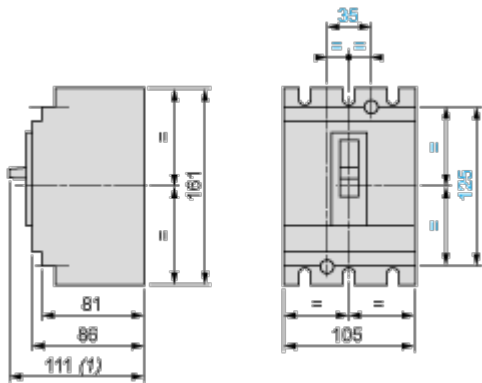


- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

Dimensions Drawings

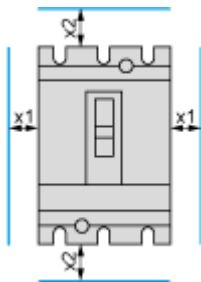
GV7R

Dimensions



(1) 126 for GV7R\_220.

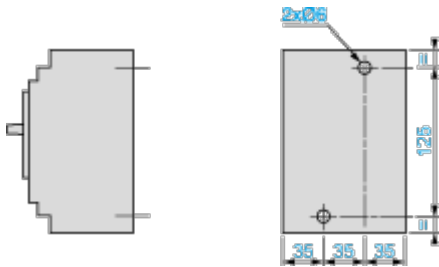
Minimum Electrical Clearance



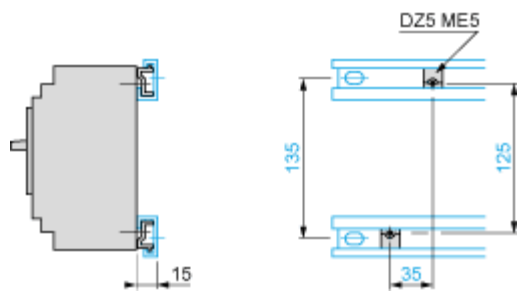
		x1	x2
Painted or insulated metal plate, insulation or insulated bar		0	30
Bare metal plate	$U \leq 440\text{ V}$	5	35
	$440\text{ V} < U < 600\text{ V}$	10	35
	$U \geq 600\text{ V}$	20	35

GV7R

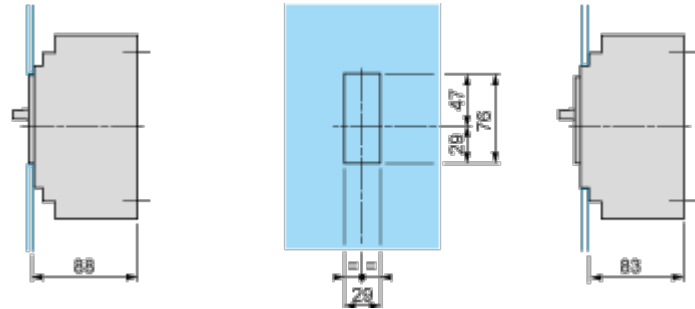
Panel Mounting



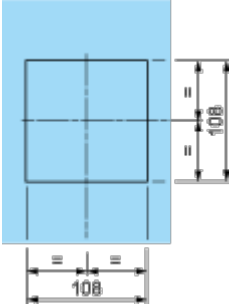
Mounting on 2 Mounting Rails DZ5 MB201



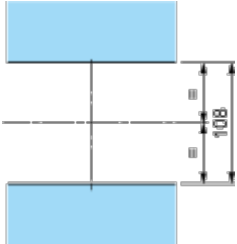
Flush-Mounting



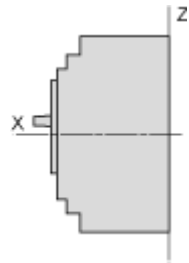
1 circuit breaker GV7R



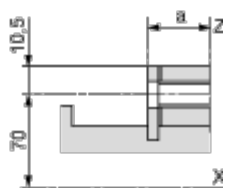
n circuit breakers GV7R side by side



Connection

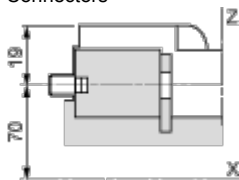


Smooth terminals



	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

