

# Product datasheet

Specifications



## TeSys GV7 - circuit breaker - 3P - AC-3 - 132...220 A - thermal-magnetic

GV7RS220

⚠ Discontinued on: Sep 9, 2020

⚠ 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	132...220 A
Trip Unit Technology	Thermal-magnetic

### Complementary

Mounting Mode	By screws By clips
Mounting Support	Kit for fixing the switchgear Panel mounting Rail Flush
Mounting Position	Vertical
Motor Power Kw	110 kW at 400...415 V AC 50/60 Hz 110 kW at 500 V AC 50/60 Hz 132 kW at 500 V AC 50/60 Hz 160 kW at 500 V AC 50/60 Hz 160 kW at 660...690 V AC 50/60 Hz 200 kW at 660...690 V AC 50/60 Hz 90 kW at 400...415 V AC 50/60 Hz
Control Type	Rocker lever
[Ue] Rated Operational Voltage	690 V AC 50/60 Hz conforming to IEC 60947-2

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

[Ui] Rated Insulation Voltage	750 V AC 50/60 Hz conforming to IEC 60947-2
[Ith] Conventional Free Air Thermal Current	220 A conforming to IEC 60947-4-1
[Uimp] Rated Impulse Withstand Voltage	8 kV conforming to IEC 60947-2
Power Dissipation Per Pole	14.5 W
Power Dissipation Per Pole	14.5 W
Mechanical Durability	20000 cycles
Electrical Durability	10000 cycles for AC-3 at 440 V In 20000 cycles for AC-3 at 440 V In/2
Maximum Operating Rate	25 cyc/h
Rated Duty	Continuous conforming to IEC 60947-4-1
Connection Pitch	35 mm without spreaders 45 mm with spreaders
Connections - Terminals	Bars Cable with lug - external diameter: 10 mm Screw Bare cable connectors 1.5...185 mm²
Tightening Torque	10 N.m on screw M6 screw type 15 N.m on bare cable connectors for cable 1.5...185 mm²
Mechanical Robustness	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
Suitability For Isolation	Yes conforming to IEC 60947-1
Phase Failure Sensitivity	Yes conforming to IEC 60947-4-1 § 7-2-1-5-2
Height	161 mm
Width	105 mm
Depth	126 mm
Net Weight	2.35 kg

## Environment

Standards	EN/IEC 60947-4-1 NF C 79-130 NF C 63-120 NF C 63-650 VDE 0660 EN/IEC 60947-1 VDE 0113 EN/IEC 60947-2
Product Certifications	UL DNV
Protective Treatment	TC
Ip Degree Of Protection	IP405 conforming to IEC 60529 (with terminal shrouds)
Pollution Degree	3
Ambient Air Temperature For Operation	-25...70 °C
Ambient Air Temperature For Storage	-55...95 °C
Fire Resistance	960 °C conforming to IEC 60695-2-1
Operating Altitude	2000 m

## Contractual warranty

Warranty	12 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

[Product Environmental Profile](#)

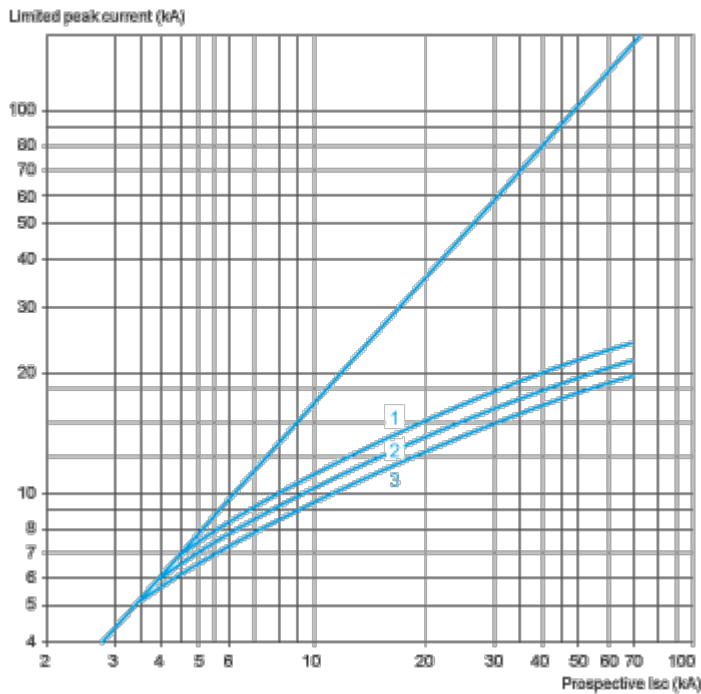
Performance Curves

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

Dynamic Stress

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

For GV7RS only



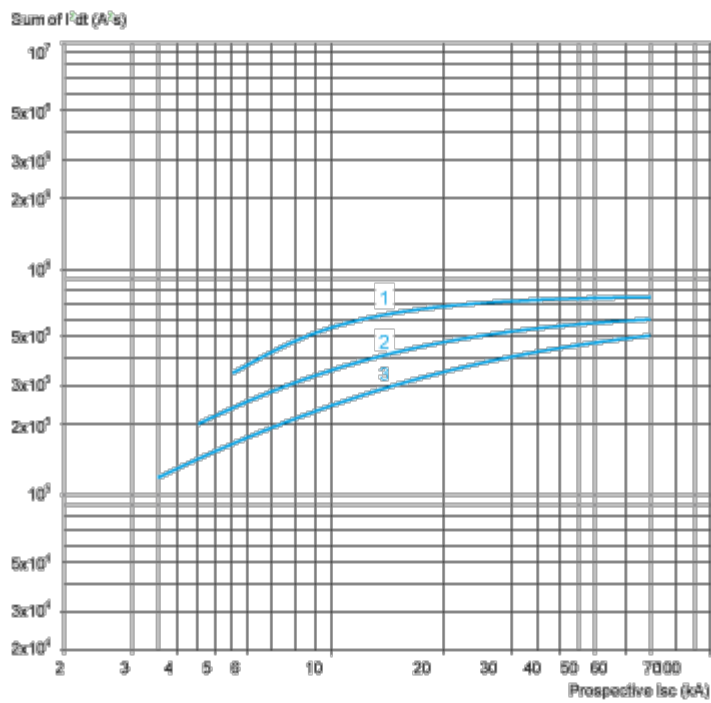
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

Thermal Limit (3-Phase 400/415 V)

Thermal Limit

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

For GV7RS only



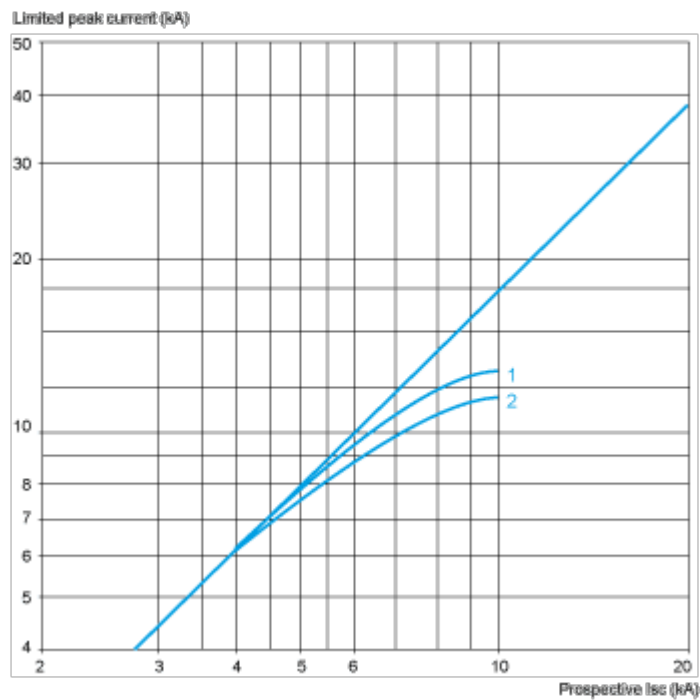
- 1
- GV7RS220
- 2
- GV7RS150
- 3
- GV7RS100

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

Dynamic Stress

I peak = f (prospective Isc)

For GV7RS only



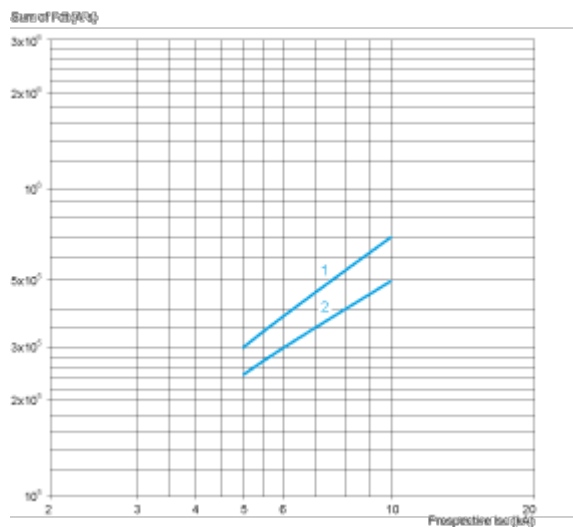
- 1
- GV7RS220
- 2
- GV7RS150 and GV7RS100

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

Thermal Limit

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

For GV7RS only

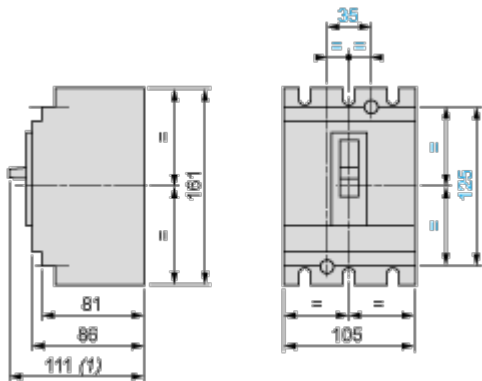


- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

Dimensions Drawings

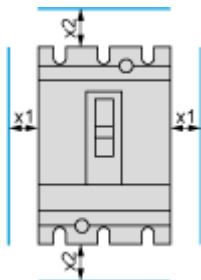
GV7R

Dimensions



(1) 126 for GV7R<sub>220</sub>.

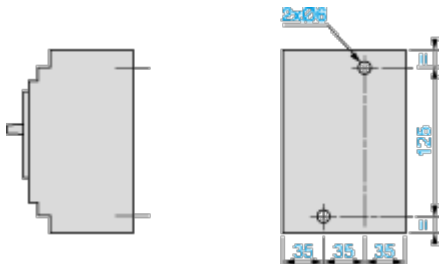
Minimum Electrical Clearance



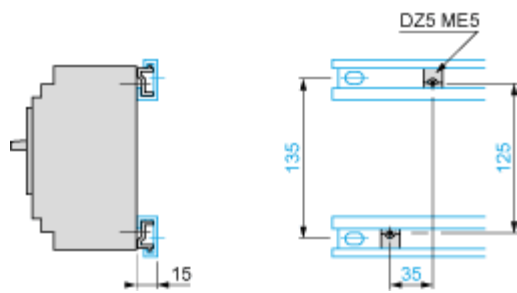
		x1	x2
Painted or insulated metal plate, insulation or insulated bar		0	30
Bare metal plate	$U \leq 440\text{ V}$	5	35
	$440\text{ V} < U < 600\text{ V}$	10	35
	$U \geq 600\text{ V}$	20	35

GV7R

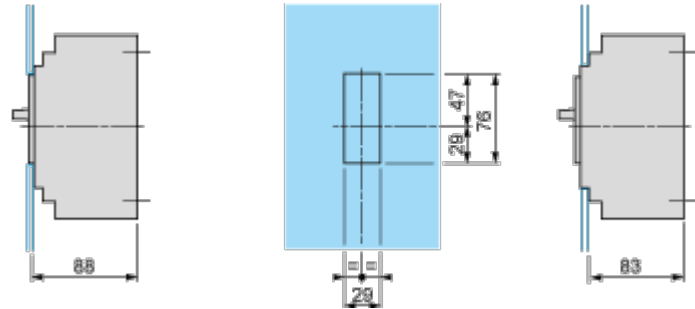
Panel Mounting



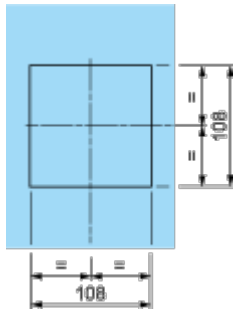
Mounting on 2 Mounting Rails DZ5 MB201



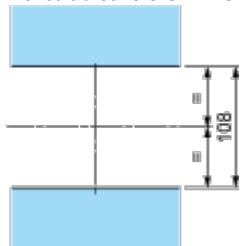
Flush-Mounting



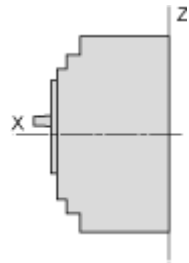
1 circuit breaker GV7R



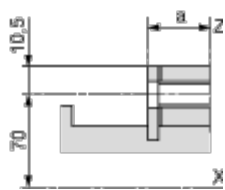
n circuit breakers GV7R side by side



Connection

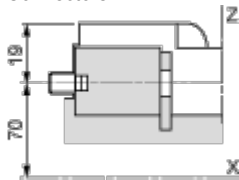


Smooth terminals



	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

