

Product data sheet

Specifications



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

GV7RS150

⚠ Discontinued on: Jan 18, 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 IEC 60947-4-1
Network Frequency	50/60 Hz IEC 60947-4-1
Breaking Capacity	50 kA Icu 500 V AC 50/60 Hz IEC 60947-2 65 kA Icu 440 V AC 50/60 Hz IEC 60947-2 100 kA Icu 220/240 V AC 50/60 Hz IEC 60947-2 70 kA Icu 380/415 V AC 50/60 Hz IEC 60947-2 10 kA Icu 660/690 V AC 50/60 Hz IEC 60947-2
[Ics] Rated Service Short-Circuit Breaking Capacity	100 % 440 V AC 50/60 Hz IEC 60947-2 100 % 500 V AC 50/60 Hz IEC 60947-2 100 % 220/240 V AC 50/60 Hz IEC 60947-2 100 % 380/415 V AC 50/60 Hz IEC 60947-2 100 % 660/690 V AC 50/60 Hz 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 660...690 V AC 50/60 Hz 55 kW 400...415 V AC 50/60 Hz 75 kW 400...415 V AC 50/60 Hz 75 kW 500 V AC 50/60 Hz 90 kW 500 V AC 50/60 Hz 90 kW 660...690 V AC 50/60 Hz
Control Type	Rocker lever
[Ue] Rated Operational Voltage	690 V AC 50/60 Hz 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 IEC 60947-2
[Ith] Conventional Free Air Thermal Current	150 A IEC 60947-4-1
[Uimp] Rated Impulse Withstand Voltage	8 kV IEC 60947-2
Power Dissipation Per Pole	8.7 W
Power Dissipation Per Pole	8.7 W
Mechanical Durability	40000 cycles
Electrical Durability	20000 cycles AC-3 440 V In 40000 cycles AC-3 440 V In/2
Maximum Operating Rate	25 cyc/h
Rated Duty	Continuous IEC 60947-4-1
Connection Pitch	1.38 in (35 mm) without spreaders 1.77 in (45 mm) with spreaders
Connections - Terminals	Bars Cable with lug - external diameter: 0.39 in (10 mm) Screw Bare cable connectors 0.00...0.15 in² (1.5...95 mm²)
Tightening Torque	88.51 lbf.in (10 N.m) screw M6 132.76 lbf.in (15 N.m) bare cable connectors 0.00...0.15 in² (1.5...95 mm²)
Mechanical Robustness	Shocks 15 Gn for 11 ms IEC 60068-2-27 Vibrations 2.5 Gn, 0...25 Hz IEC 60068-2-6
Suitability For Isolation	Yes IEC 60947-1
Phase Failure Sensitivity	Yes IEC 60947-4-1 § 7-2-1-5-2
Height	6.34 in (161 mm)
Width	4.13 in (105 mm)
Depth	4.37 in (111 mm)
Net Weight	4.45 lb(US) (2.02 kg)

Environment

Standards	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
Product Certifications	UL DNV
Protective Treatment	TC
Ip Degree Of Protection	IP405 IEC 60529 with terminal shrouds)
Pollution Degree	3
Ambient Air Temperature For Operation	-13...158 °F (-25...70 °C)
Ambient Air Temperature For Storage	-67...203 °F (-55...95 °C)
Fire Resistance	1760 °F (960 °C) IEC 60695-2-1
Operating Altitude	2000 m

Packing Units

Unit Type Of Package 1	PCE
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Number Of Units In Package 1	1
Package 1 Height	4.33 in (11 cm)
Package 1 Width	5.51 in (14 cm)
Package 1 Length	6.89 in (17.5 cm)
Package 1 Weight	4.32 lb(US) (1.958 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-CO₂ 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](#)

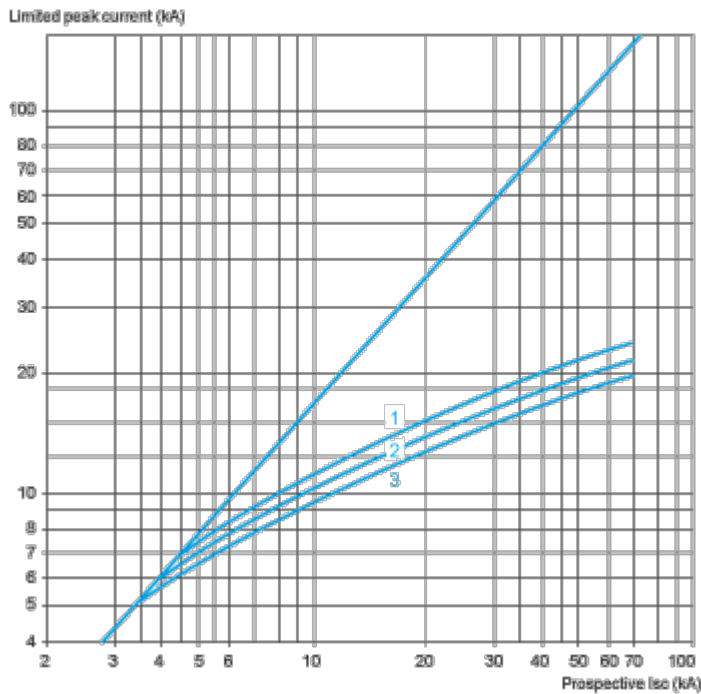
Performance Curves

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

Dynamic Stress

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

For GV7RS only



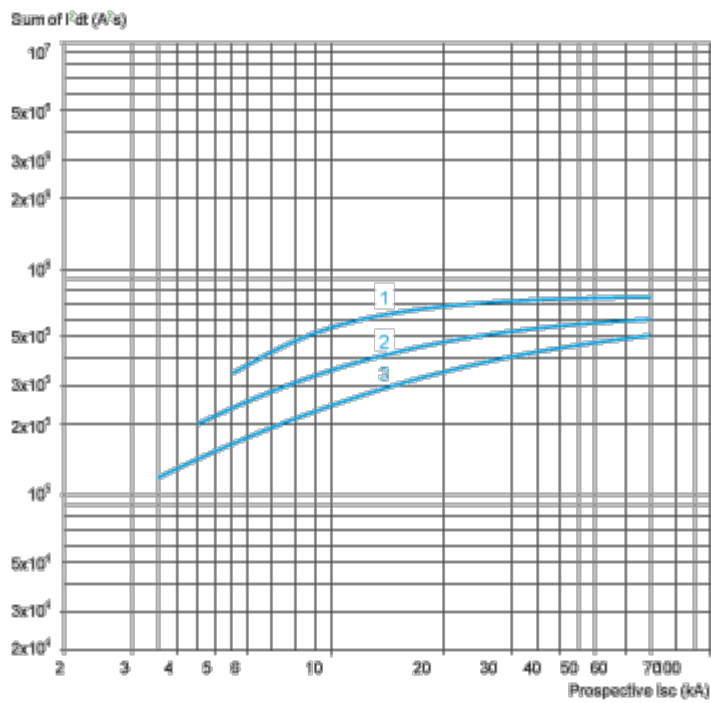
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

Thermal Limit (3-Phase 400/415 V)

Thermal Limit

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

For GV7RS only



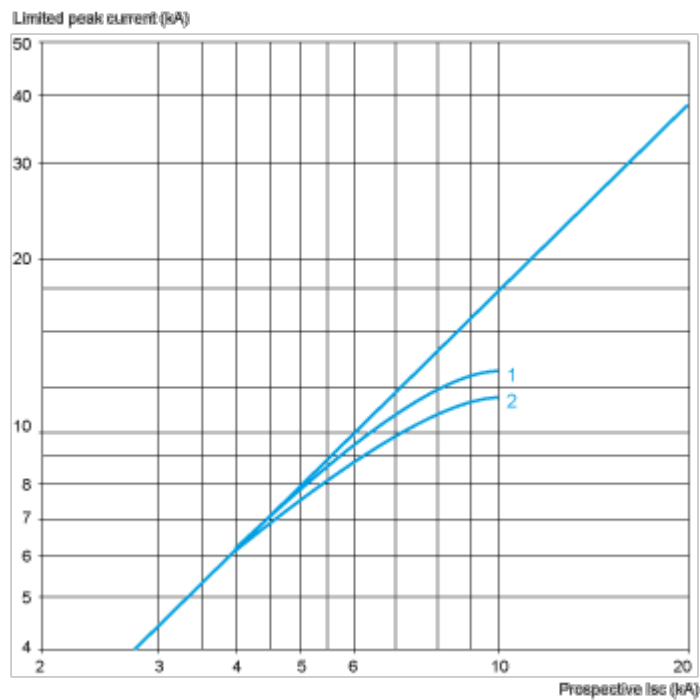
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

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

Dynamic Stress

I peak = f (prospective Isc)

For GV7RS only



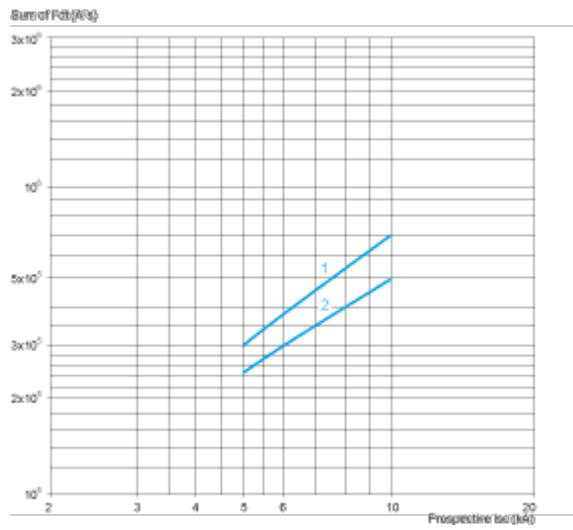
- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

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

Thermal Limit

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

For GV7RS only

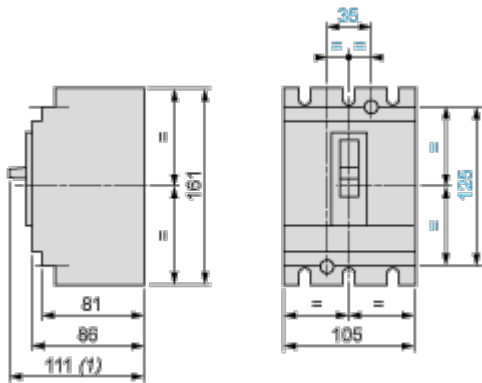


- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

Dimensions Drawings

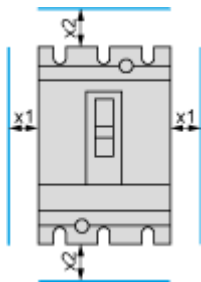
GV7R

Dimensions



(1) 126 for GV7R_220.

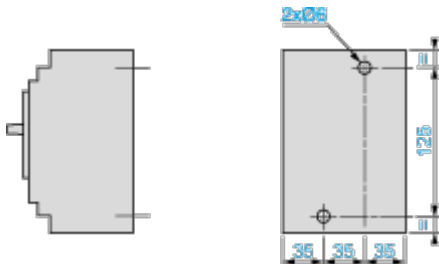
Minimum Electrical Clearance



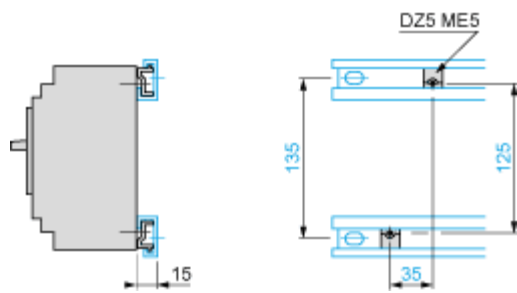
		x1	x2
Painted or insulated metal plate, insulation or insulated bar		0	30
Bare metal plate	$U \leq 440\text{ V}$	5	35
	$440\text{ V} < U < 600\text{ V}$	10	35
	$U \geq 600\text{ V}$	20	35

GV7R

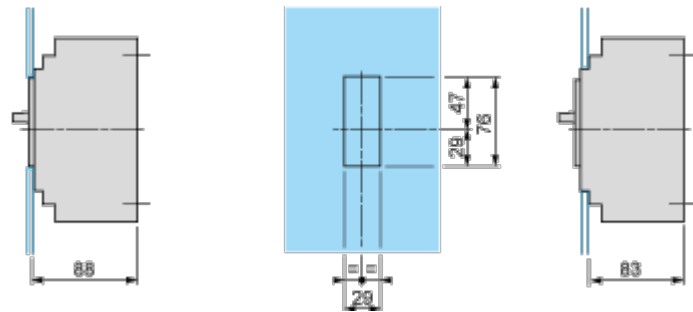
Panel Mounting



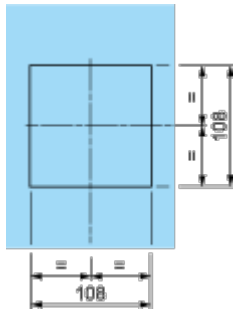
Mounting on 2 Mounting Rails DZ5 MB201



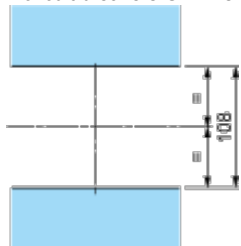
Flush-Mounting



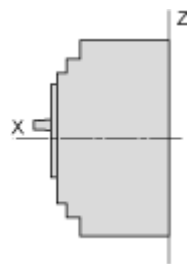
1 circuit breaker GV7R



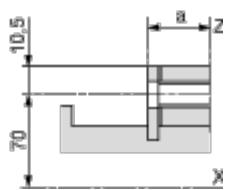
n circuit breakers GV7R side by side



Connection

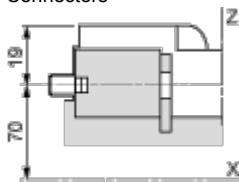


Smooth terminals



	a
GV7R _• 40...R _• 150	19.5
GV7R _• 220	21.5

Connectors



Connections and Schema

Motor Circuit Breakers
GV7 R

