

Product data sheet

Specifications



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

GV7RE220

⚠ 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	35 kA Icu 440 V AC 50/60 Hz IEC 60947-2 85 kA Icu 220/240 V AC 50/60 Hz IEC 60947-2 35 kA Icu 380/415 V AC 50/60 Hz IEC 60947-2 25 kA Icu 500 V AC 50/60 Hz IEC 60947-2 8 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 % 220/240 V AC 50/60 Hz IEC 60947-2 100 % 380/415 V AC 50/60 Hz IEC 60947-2 50 % 500 V AC 50/60 Hz IEC 60947-2 50 % 660/690 V AC 50/60 Hz IEC 60947-2
Thermal Protection Adjustment Range	132...220 A
Trip Unit Technology	Thermal-magnetic

Complementary

Mounting Mode	By screws By clips
Mounting Support	Panel mounting Rail Kit for fixing the switchgear Flush
Mounting Position	Vertical
Motor Power Kw	110 kW 400...415 V AC 50/60 Hz 110 kW 500 V AC 50/60 Hz 132 kW 500 V AC 50/60 Hz 160 kW 500 V AC 50/60 Hz 160 kW 660...690 V AC 50/60 Hz 200 kW 660...690 V AC 50/60 Hz 90 kW 400...415 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	220 A IEC 60947-4-1
[Uimp] Rated Impulse Withstand Voltage	8 kV 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 AC-3 440 V In 20000 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...0.29 in² (1.5...185 mm²)
Tightening Torque	88.51 lbf.in (10 N.m) screw M6 132.76 lbf.in (15 N.m) bare cable connectors 0.00...0.29 in² (1.5...185 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	4.96 in (126 mm)
Net Weight	5.18 lb(US) (2.35 kg)

Environment

Standards	VDE 0113 EN/IEC 60947-4-1 VDE 0660 EN/IEC 60947-1 NF C 63-120 EN/IEC 60947-2 NF C 79-130 NF C 63-650
Product Certifications	DNV UL
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	4.57 in (11.6 cm)
Package 1 Width	5.51 in (14 cm)
Package 1 Length	6.93 in (17.6 cm)
Package 1 Weight	4.59 lb(US) (2.08 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

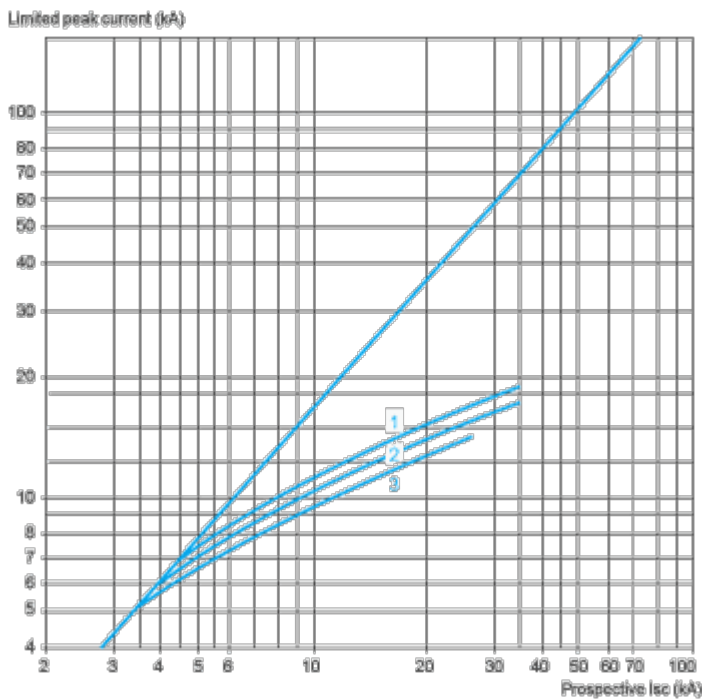
Performance Curves

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

Dynamic Stress

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

For GV7RE only



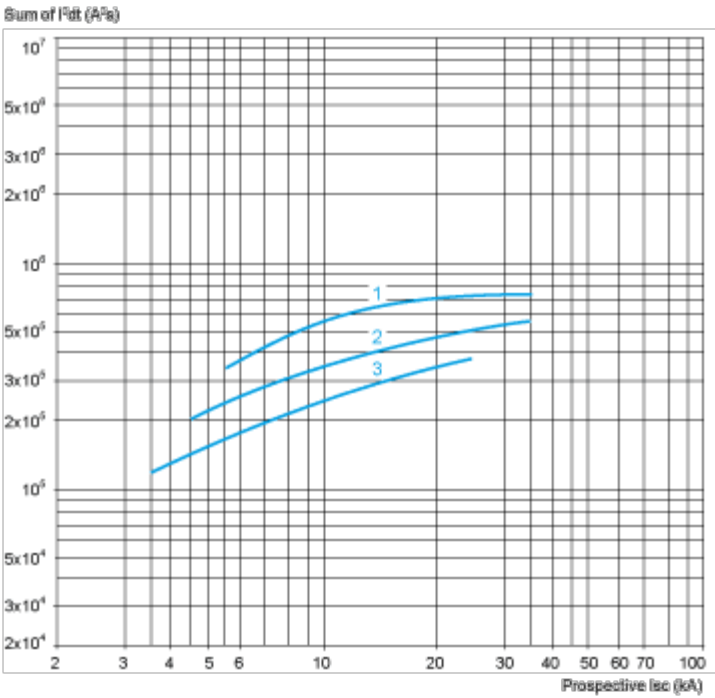
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

Thermal Limit (3-Phase 400/415 V)

Thermal Limit

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

For GV7RE only



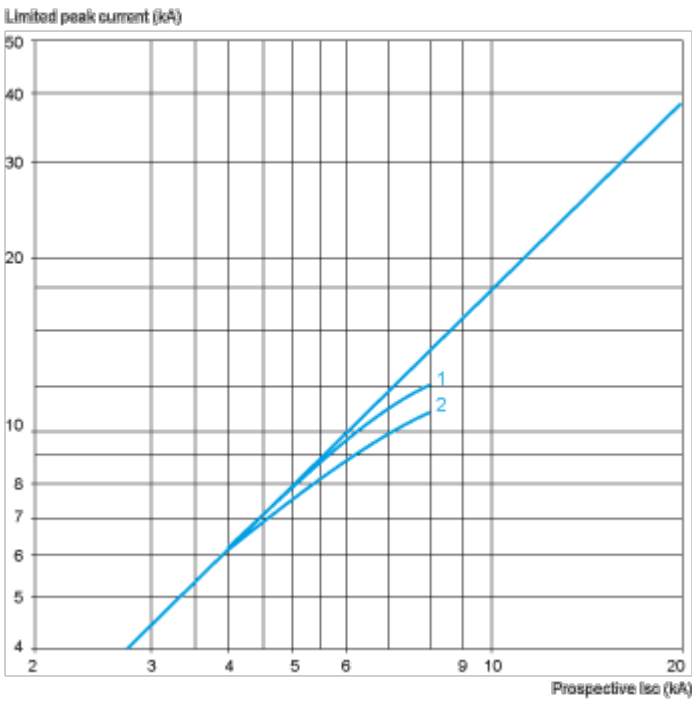
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

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

Dynamic Stress

I_{peak} = f (prospective I_{sc})

For GV7RE only



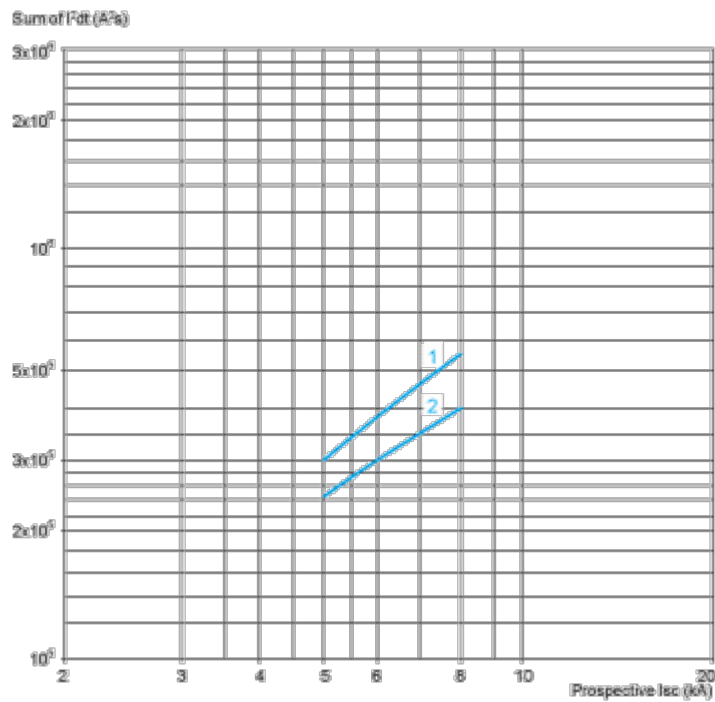
- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

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

Thermal Limit

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

For GV7RE only

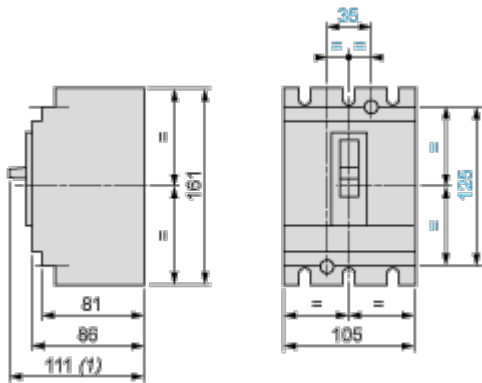


- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

Dimensions Drawings

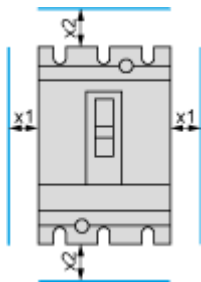
GV7R

Dimensions



(1) 126 for GV7R₂₂₀.

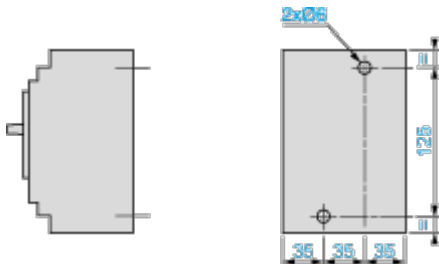
Minimum Electrical Clearance



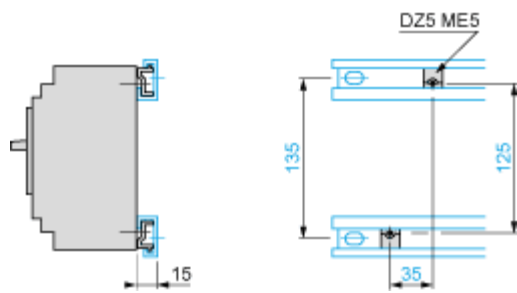
		x1	x2
Painted or insulated metal plate, insulation or insulated bar		0	30
Bare metal plate	$U \leq 440\text{ V}$	5	35
	$440\text{ V} < U < 600\text{ V}$	10	35
	$U \geq 600\text{ V}$	20	35

GV7R

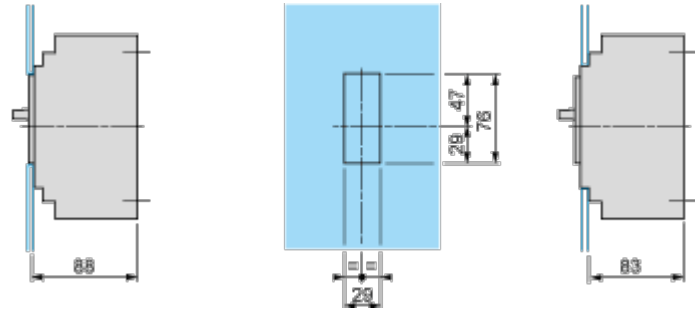
Panel Mounting



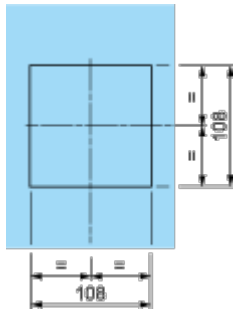
Mounting on 2 Mounting Rails DZ5 MB201



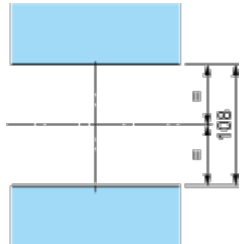
Flush-Mounting



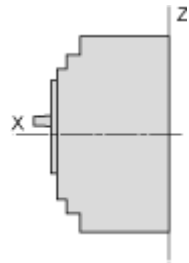
1 circuit breaker GV7R



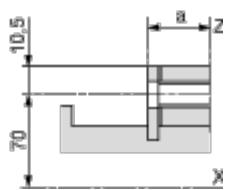
n circuit breakers GV7R side by side



Connection

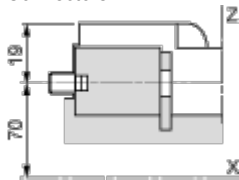


Smooth terminals



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

Connectors



Connections and Schema

Motor Circuit Breakers
GV7 R

