Product datasheet

Specifications

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

GV7RS220

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

[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

Packing Units

Unit Type of Package 1	PCE

Number of Units in Package 1	1

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Use Better

Materials and Substances

EU RoHS Directive	**Not applicable, out of EU RoHS legal scope**

Use Again

Repack and remanufacture

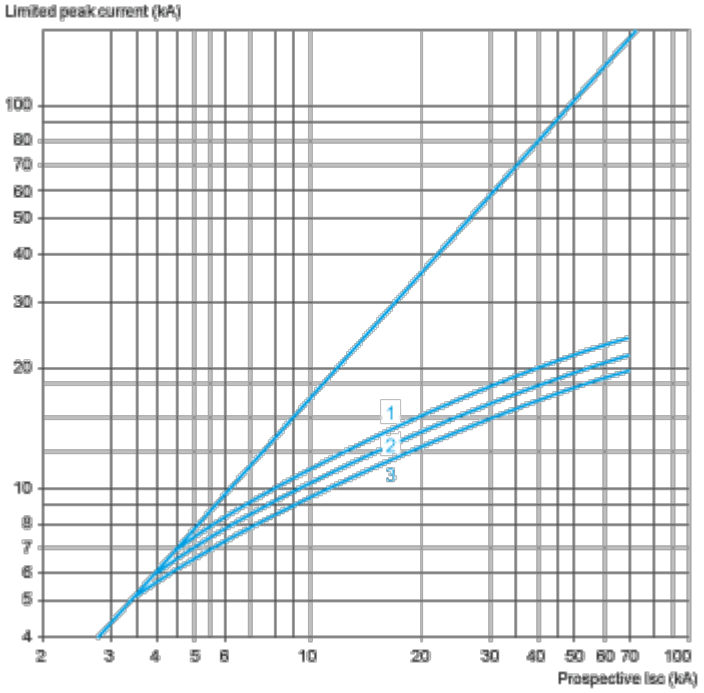
WEEE Label	 **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Performance Curves

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

Dynamic Stress

I peak = f (prospective Isc)
For GV7RS only



1 GV7RS220

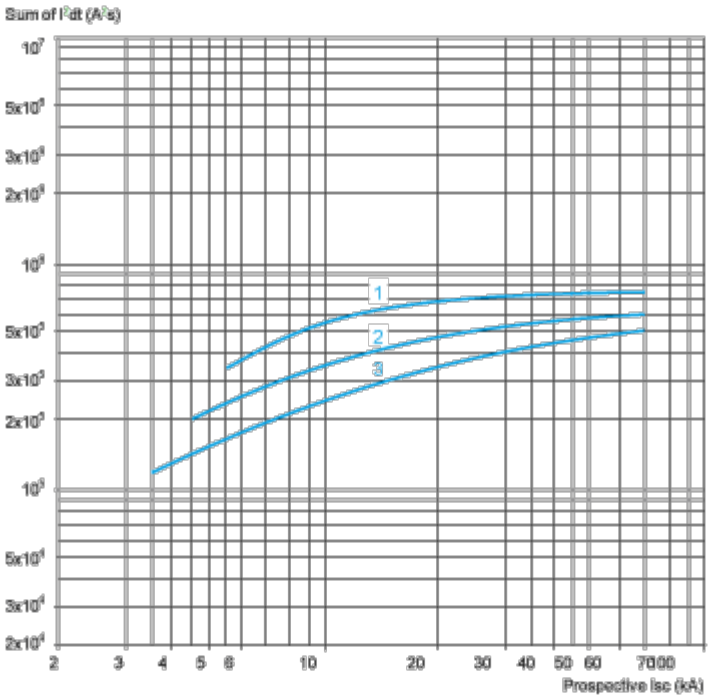
2 GV7RS150

3 GV7RS100

Thermal Limit (3-Phase 400/415 V)

Thermal Limit

Sum of I^2dt = f (prospective Isc)
For GV7RS only



1 GV7RS220

2 GV7RS150

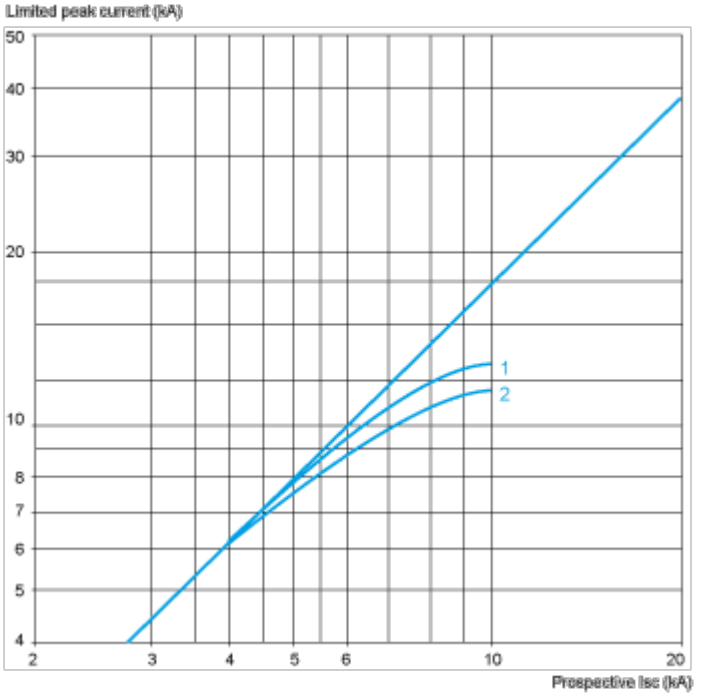
3 GV7RS100

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

Dynamic Stress

I peak = f (prospective Isc)

For GV7RS only



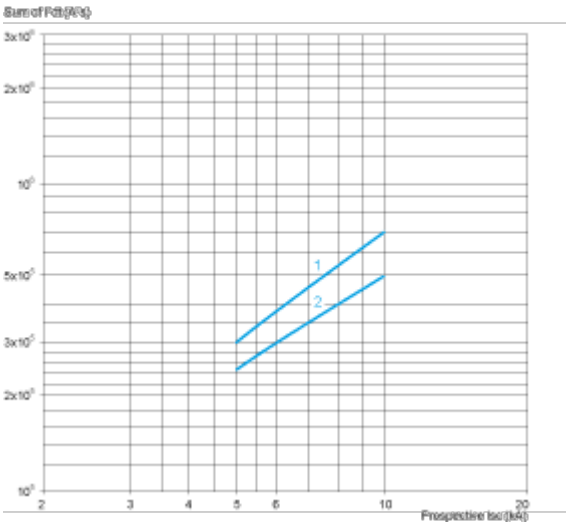
1 GV7RS220

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



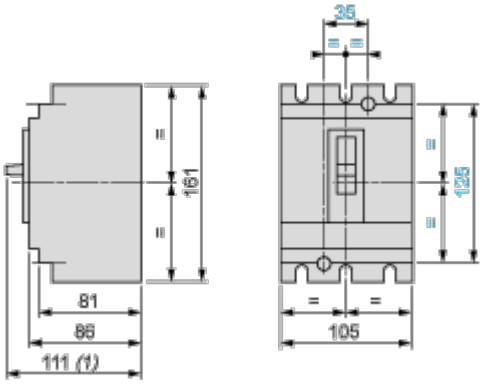
1 GV7RS220

2 GV7RS150 and GV7RS100

Dimensions Drawings

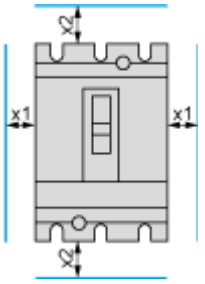
GV7R

Dimensions



(1) 126 for GV7R•220.

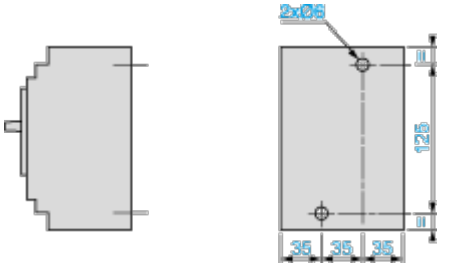
Minimum Electrical Clearance



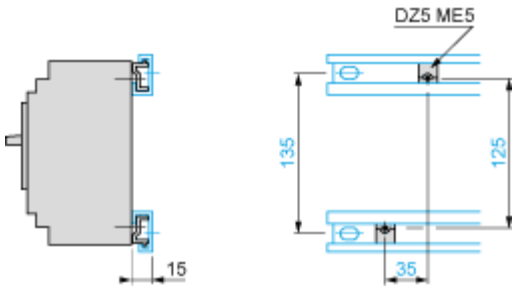
		x1	x2
Painted or insulated metal plate, insulation or insulated bar		0	30
Bare metal plate	U ≤ 440 V	5	35
	440 V < U < 600 V	10	35
	U ≥600 V	20	35

GV7R

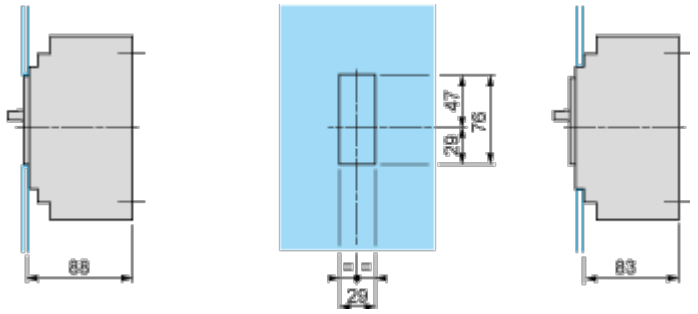
Panel Mounting



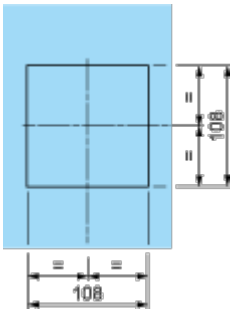
Mounting on 2 Mounting Rails DZ5 MB201



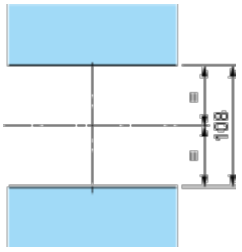
Flush-Mounting



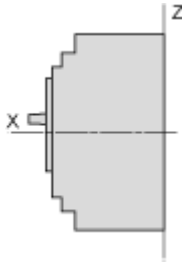
1 circuit breaker GV7R



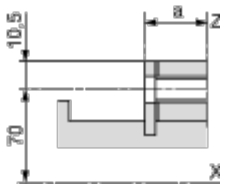
n circuit breakers GV7R side by side



Connection

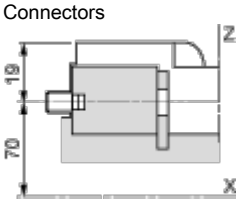


Smooth terminals



	a
GV7R●40…R●150	19.5
GV7R●220	21.5

Connectors



Connections and Schema

Motor Circuit Breakers
GV7 R