

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

GV7RS150

! 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
[lcs] 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	90150 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 at 660690 V AC 50/60 Hz
	55 kW at 400415 V AC 50/60 Hz
	75 kW at 400415 V AC 50/60 Hz
	75 kW at 500 V AC 50/60 Hz
	90 kW at 500 V AC 50/60 Hz
	90 kW at 660690 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	150 A conforming to IEC 60947-4-1	
[Uimp] rated impulse withstand voltage	8 kV conforming to 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 for AC-3 at 440 V In 40000 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 1.595 mm²	
Tightening torque	10 N.m on screw M6 screw type 15 N.m on bare cable connectors for cable 1.595 mm²	
Mechanical robustness	Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations: 2.5 Gn, 025 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	111 mm	
net weight	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	тс
IP degree of protection	IP405 conforming to IEC 60529 (with terminal shrouds)
Pollution degree	3
Ambient air temperature for operation	-2570 °C
Ambient air temperature for storage	-5595 °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
Package 1 Height	11 cm
Package 1 Width	14 cm
Package 1 Length	17.5 cm
Package 1 Weight	1.958 kg

# **Contractual warranty**

Warranty 18 months

## Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass 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 >

**Eu Rohs Directive** 

Not applicable, out of EU RoHS legal scope

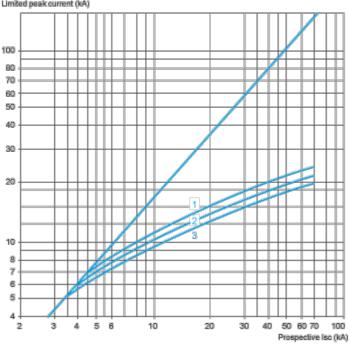
### Performance Curves

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

**Dynamic Stress** 

I peak = f (prospective Isc) For GV7RS only

Limited peak current (kA)

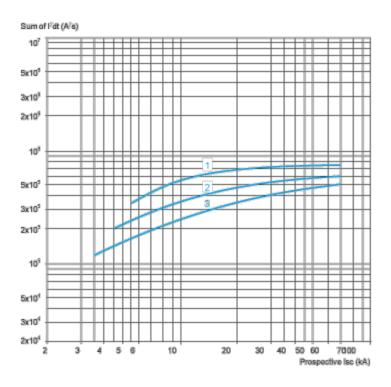


- **GV7RS220**
- GV7RS150 2
- GV7RS100 3

## Thermal Limit (3-Phase 400/415 V)

Thermal Limit

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



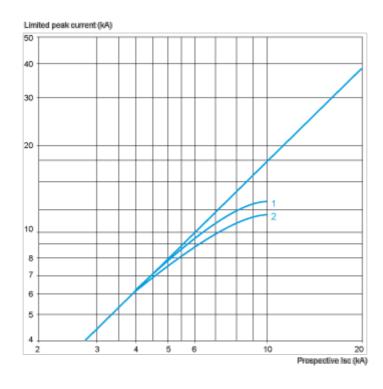
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

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

**Dynamic Stress** 

I peak = f (prospective Isc)

For GV7RS only

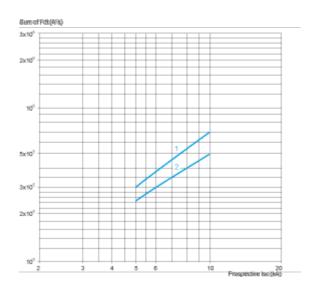


- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

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

#### Thermal Limit

Sum of I<sup>2</sup>dt = f (prospective Isc) For GV7RS only

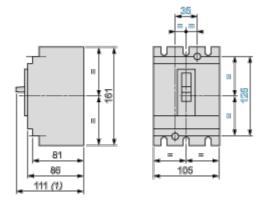


- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

## **Dimensions Drawings**

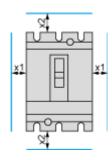
### **GV7R**

#### **Dimensions**



(1) 126 for  $\text{GV7R}_{\bullet}$ 220.

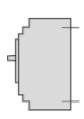
### **Minimum Electrical Clearance**



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

## GV7R

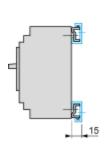
### **Panel Mounting**

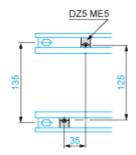




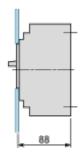
Mounting on 2 Mounting Rails DZ5 MB201

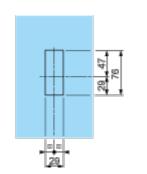
## **GV7RS150**

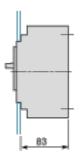




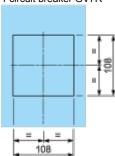
## Flush-Mounting



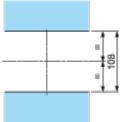




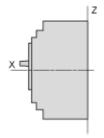
#### 1 circuit breaker GV7R



n circuit breakers GV7R side by side



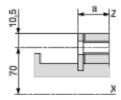
#### Connection



Smooth terminals

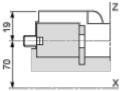
# **Product datasheet**

## **GV7RS150**



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GV7R•40R•150	19.5
GV7R <sub>•</sub> 220	21.5

### Connectors



## Connections and Schema

**Motor Circuit Breakers** 

