

# Product data sheet

Specifications



## TeSys GV7 Manual Starter and Protector, thermal magnetic circuit protector, rocker lever, 3 P, AC-3, 60...100 A

GV7RE100

! Discontinued on: 23 January 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 36 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	60...100 A
Trip unit technology	Thermal-magnetic
<b>Complementary</b>	
Mounting Mode	By screws By clips
Mounting Support	Flush Rail Kit for fixing the switchgear Panel mounting
Mounting position	Vertical
Motor power kW	45 kW 400...415 V AC 50/60 Hz 75 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
[Ui] rated insulation voltage	750 V AC 50/60 Hz IEC 60947-2

<b>[Ith] conventional free air thermal current</b>	100 A IEC 60947-4-1
<b>[Uimp] rated impulse withstand voltage</b>	8 kV IEC 60947-2
<b>Power dissipation per pole</b>	5 W
<b>Power dissipation per pole</b>	5 W
<b>Mechanical durability</b>	50000 cycles
<b>Electrical durability</b>	30000 cycles AC-3 440 V In 50000 cycles AC-3 440 V In/2
<b>Maximum operating rate</b>	25 cyc/h
<b>Rated duty</b>	Continuous IEC 60947-4-1
<b>Connection pitch</b>	1.38 in (35 mm) without spreaders 1.77 in (45 mm) with spreaders
<b>Connections - terminals</b>	bars cable with lug 0.39 in (10 mm) screw bare cable connectors 0.00...0.15 in <sup>2</sup> (1.5...95 mm <sup>2</sup> )
<b>Tightening torque</b>	88.51 lbf.in (10 N.m) screw M6 132.76 lbf.in (15 N.m) bare cable connectors 0.00...0.15 in <sup>2</sup> (1.5...95 mm <sup>2</sup> )
<b>Mechanical robustness</b>	Shocks 15 Gn for 11 ms IEC 60068-2-27 Vibrations 2.5 Gn, 0...25 Hz IEC 60068-2-6
<b>Suitability for isolation</b>	Yes IEC 60947-1
<b>Phase failure sensitivity</b>	Yes IEC 60947-4-1 § 7-2-1-5-2
<b>Height</b>	6.34 in (161 mm)
<b>Width</b>	4.13 in (105 mm)
<b>Depth</b>	4.37 in (111 mm)
<b>Net Weight</b>	4.50 lb(US) (2.04 kg)

## Environment

<b>Standards</b>	NF C 63-120 VDE 0660 NF C 63-650 EN/IEC 60947-1 EN/IEC 60947-4-1 EN/IEC 60947-2 VDE 0113 NF C 79-130
<b>Product Certifications</b>	DNV UL
<b>Protective treatment</b>	TC
<b>IP degree of protection</b>	IP405 IEC 60529 with terminal shrouds)
<b>Pollution degree</b>	3
<b>Ambient air temperature for operation</b>	-13...158 °F (-25...70 °C)
<b>Ambient Air Temperature for Storage</b>	-67...203 °F (-55...95 °C)
<b>Fire resistance</b>	1760 °F (960 °C) IEC 60695-2-1
<b>Operating altitude</b>	6561.68 ft (2000 m)

## Ordering and shipping details

<b>Category</b>	22366-MAN STR PROTECTORS-GV1/GV3
<b>Discount Schedule</b>	111
<b>GTIN</b>	3389110566840

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Returnability	No
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Country of origin	CN
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	4.53 in (11.5 cm)
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Package 1 Width	5.51 in (14 cm)
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Package 1 Length	6.89 in (17.5 cm)
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Package 1 Weight	4.25 lb(US) (1.928 kg)
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## Offer Sustainability

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EU RoHS Directive	Not applicable, out of EU RoHS legal scope
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Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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## Contractual warranty

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Warranty	18 months
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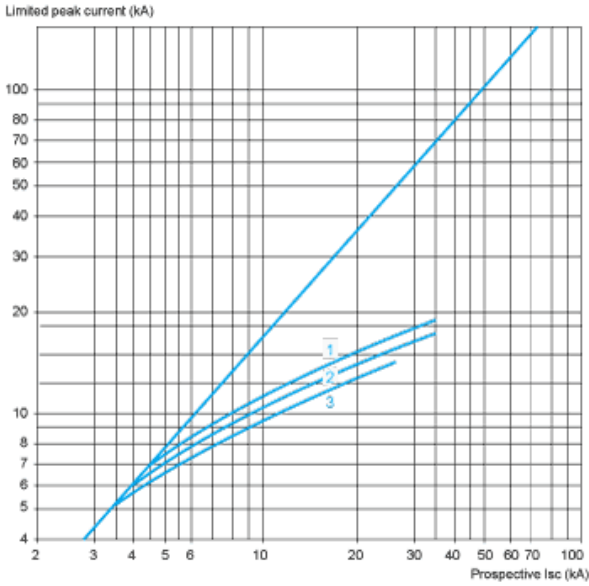
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**Current Limitation on Short-Circuit (3-Phase 400/415 V)**

**Dynamic Stress**

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

For GV7RE only



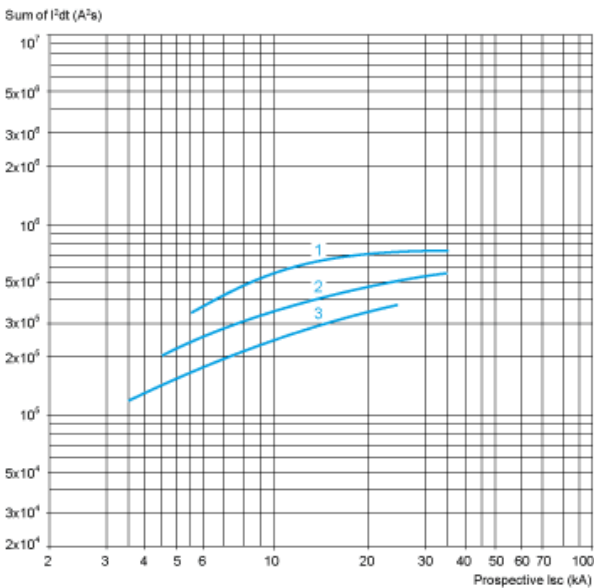
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

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

**Thermal Limit**

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

For GV7RE only



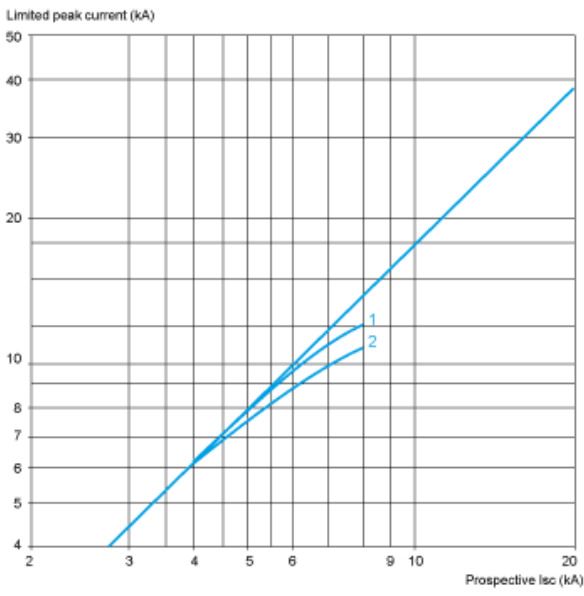
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

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

**Dynamic Stress**

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

For GV7RE only



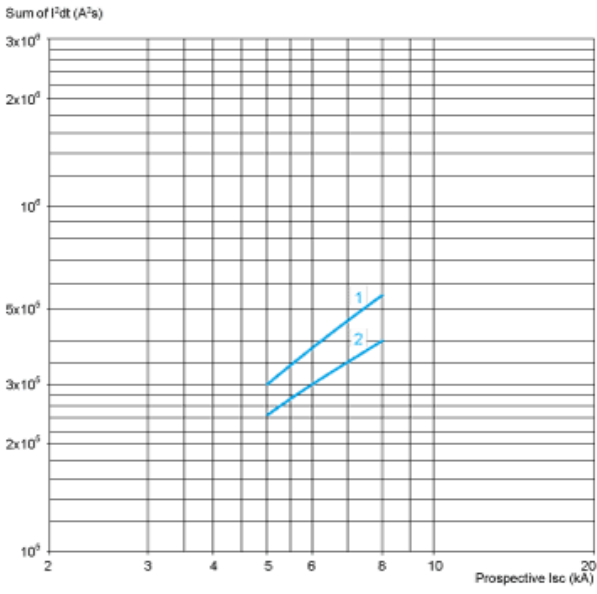
- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

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

**Thermal Limit**

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

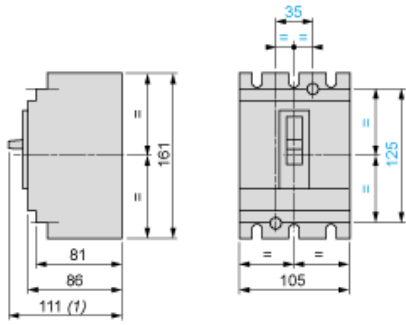
For GV7RE only



- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

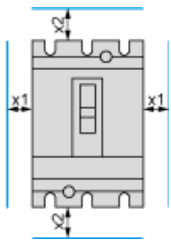
**GV7R**

Dimensions



(1) 126 for GV7R.220.

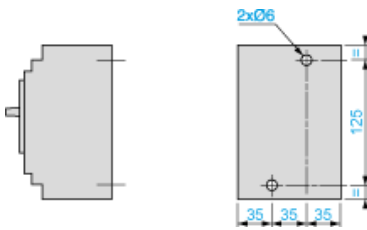
**Minimum Electrical Clearance**



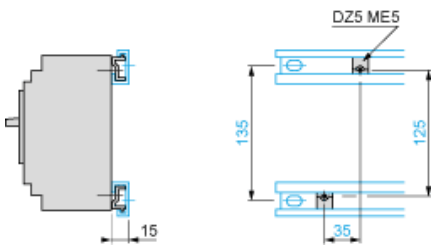
	x1	x2
Painted or insulated metal plate, insulation or insulated bar	0	30
Bare metal plate	$U \leq 440 \text{ V}$	5
	$440 \text{ V} < U < 600 \text{ V}$	10
	$U \geq 600 \text{ V}$	20

**GV7R**

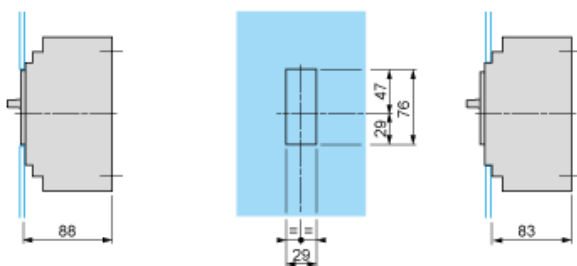
Panel Mounting



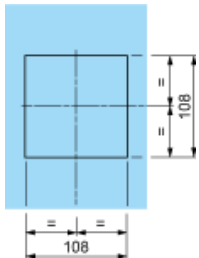
**Mounting on 2 Mounting Rails DZ5 MB201**



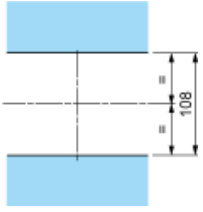
**Flush-Mounting**



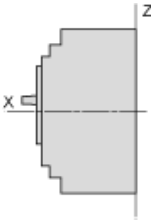
**1 circuit breaker GV7R**



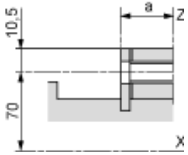
n circuit breakers GV7R side by side



**Connection**

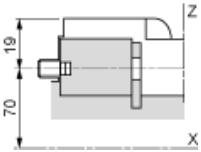


**Smooth terminals**



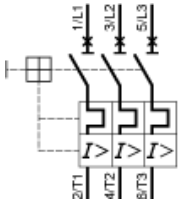
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GV7R.40...R.150	19.5
GV7R.220	21.5

**Connectors**



**Motor Circuit Breakers**

GV7 R



**Recommended replacement(s)**

GV7RE100 is replaced by:

1x



Motor circuit breaker, TeSys GV4, 3P, 115A, Icu 25kA, thermal magnetic, Everlink terminals  
GV4PE115B