

GV7RS100

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



Main

Range	TeSys
Product name	TeSys GV7
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	60...100 A
Trip unit technology	Thermal-magnetic

Complementary

Mounting mode	By screws By clips
Mounting support	Kit for fixing the switchgear Rail Flush 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
[Ith] conventional free air thermal current	100 A IEC 60947-4-1
[Uimp] rated impulse withstand voltage	8 kV IEC 60947-2
Power dissipation per pole	5 W
Power dissipation per pole	5 W
Mechanical durability	50000 cycles
Electrical durability	30000 Cycles AC-3 440 V In 50000 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 0.39 in (10 mm) Screw Bare cable connectors 0.00...0.15 in ² (1.5...95 mm ²)
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 in ² (1.5...95 mm ²)

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
Maximum Height	6.34 in (161 mm)
Maximum Width	4.13 in (105 mm)
Maximum Depth	4.37 in (111 mm)
Net Weight	4.50 lb(US) (2.04 kg)

Environment

Standards	NF C 63-120 EN/IEC 60947-2 NF C 63-650 VDE 0113 EN/IEC 60947-1 VDE 0660 NF C 79-130 EN/IEC 60947-4-1
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	6561.68 ft (2000 m)

Ordering and shipping details

Category	22366 - MAN STR PROTECTORS-GV1/GV3
Discount Schedule	I11
GTIN	00785901294283
Nbr. of units in pkg.	1
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	No
Country of origin	CN

Packing Units

Package 1 Height	5.51 in (14.000 cm)
Package 1 width	4.53 in (11.500 cm)
Package 1 Length	6.89 in (17.500 cm)

Offer Sustainability

EU RoHS Directive	Not applicable, out of EU RoHS legal scope
Environmental Disclosure	 Product Environmental Profile

Contractual warranty

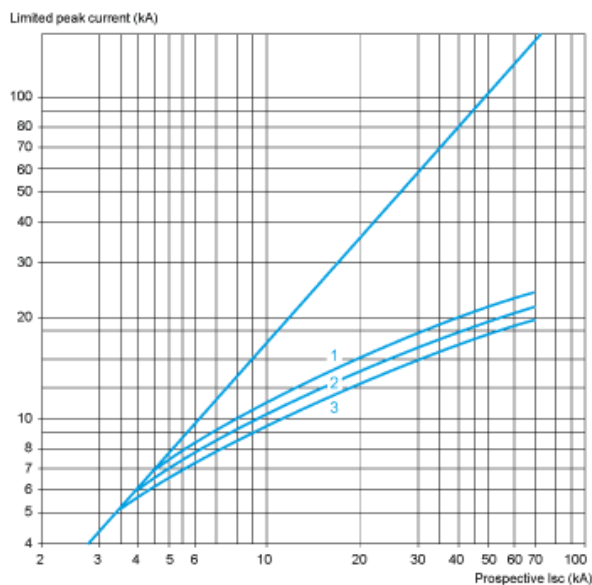
Warranty	18 months
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Current Limitation on Short-Circuit (3-Phase 400/415 V)

Dynamic Stress

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

For GV7RS only



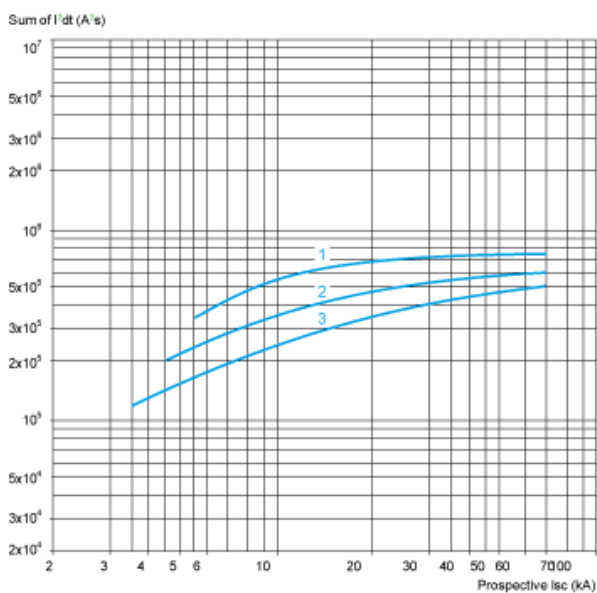
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

Thermal Limit (3-Phase 400/415 V)

Thermal Limit

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

For GV7RS only



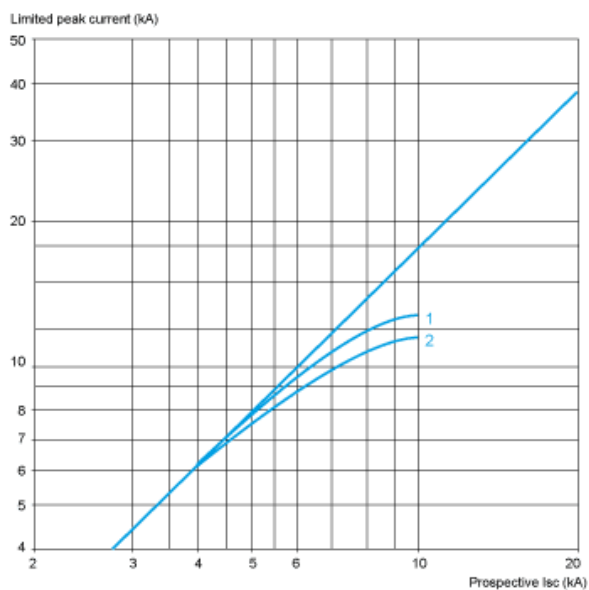
- 1 GV7RS220
- 2 GV7RS150
- 3 GV7RS100

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

Dynamic Stress

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

For GV7RS only



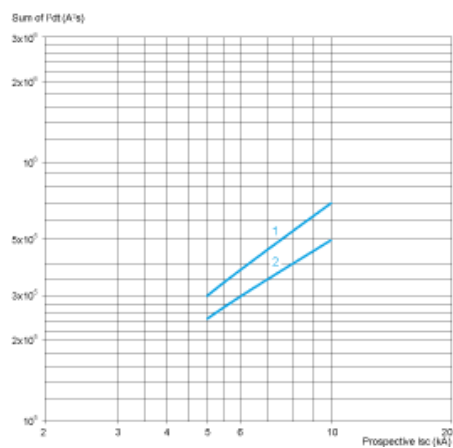
- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

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

Thermal Limit

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

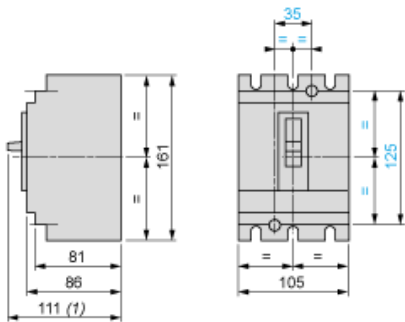
For GV7RS only



- 1 GV7RS220
- 2 GV7RS150 and GV7RS100

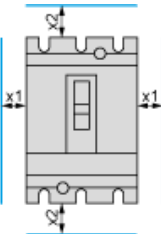
GV7R

Dimensions



(1) 126 for GV7R.220.

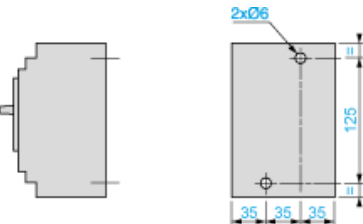
Minimum Electrical Clearance



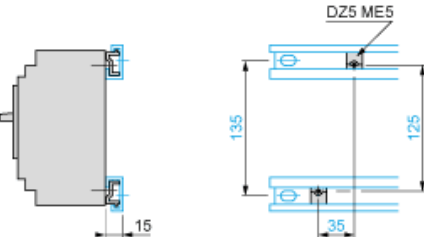
		x1	x2
Painted or insulated metal plate, insulation or insulated bar		0	30
Bare metal plate	$U \leq 440 \text{ V}$	5	35
$440 \text{ V} < U < 600 \text{ V}$		35	
$U \geq 600 \text{ V}$		35	

GV7R

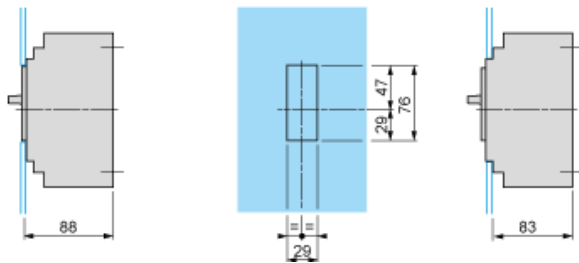
Panel Mounting



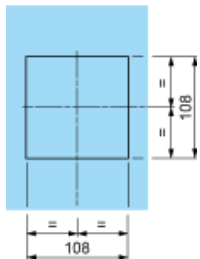
Mounting on 2 Mounting Rails DZ5 MB201



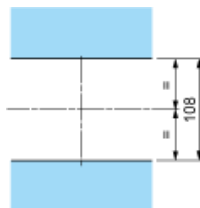
Flush-Mounting



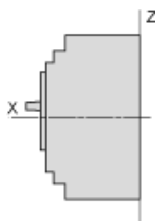
1 circuit breaker GV7R



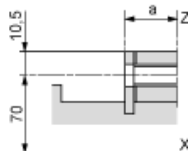
n circuit breakers GV7R side by side



Connection

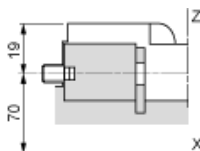


Smooth terminals



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

Connectors



Motor Circuit Breakers

GV7 R

