

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

! Discontinued on: Jan 23, 2021

Product availability: Non-Stock - Not normally stocked in distribution facility

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 |

Complementary

| | |
|--------------------------------|--|
| 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 |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| | |
|--|--|
| [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 | 1.4 in (35 mm) without spreaders 1.8 in (45 mm) with spreaders |
| Connections - terminals | Bars Cable with lug - external diameter: 0.4 in (10 mm) Screw Bare cable connectors 0.002...0.1 in ² (1.5...95 mm ²) |
| Tightening torque | 88.5 lbf.in (10 N.m) screw M6 132.8 lbf.in (15 N.m) bare cable connectors 0.002...0.1 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 |
| Height | 6.3 in (161 mm) |
| Width | 4.1 in (105 mm) |
| Depth | 4.4 in (111 mm) |
| Net Weight | 4.50 lb(US) (2.04 kg) |

Environment

| | |
|--|---|
| Standards | 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 |
| 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 | -13.0000000000...158.0000000000 °F (-25...70 °C) |
| Ambient Air Temperature for Storage | -67.0000000000...203.0000000000 °F (-55...95 °C) |
| Fire resistance | 1760.0000000000 °F (960 °C) IEC 60695-2-1 |
| Operating altitude | 6561.68 ft (2000 m) |

Ordering and shipping details

| | |
|--------------------------|-------------|
| Category | US10I122366 |
| Discount Schedule | 0111 |

| | |
|--------------------------|---------------|
| GTIN | 3389110566840 |
| Returnability | No |
| Country of origin | US |

Packing Units

| | |
|-------------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.5 in (11.5 cm) |
| Package 1 Width | 5.5 in (14 cm) |
| Package 1 Length | 6.9 in (17.5 cm) |
| Package 1 Weight | 4.251 lb(US) (1.928 kg) |

Contractual warranty

| | |
|-----------------|-----------|
| Warranty | 18 months |
|-----------------|-----------|

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 >](#)

Eu Rohs Directive

Not applicable, out of EU RoHS legal scope

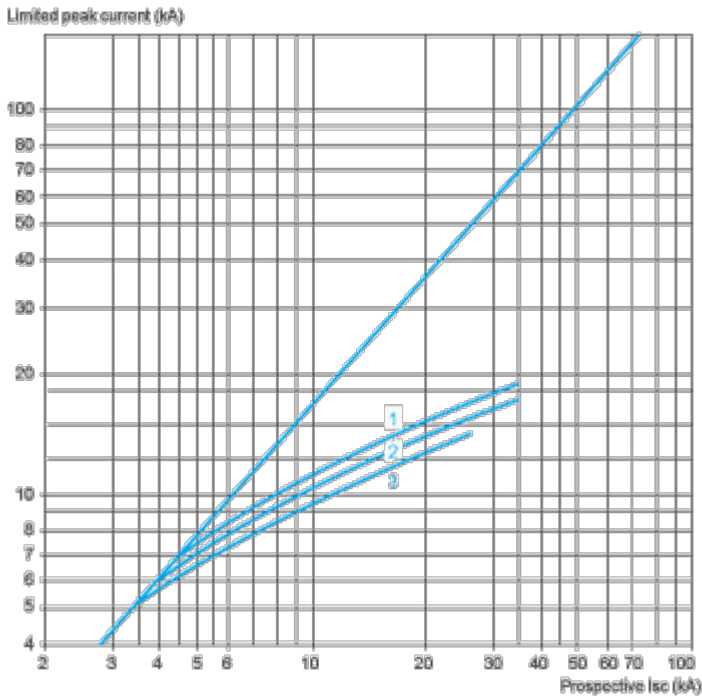
Performance Curves

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

Dynamic Stress

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

For GV7RE only



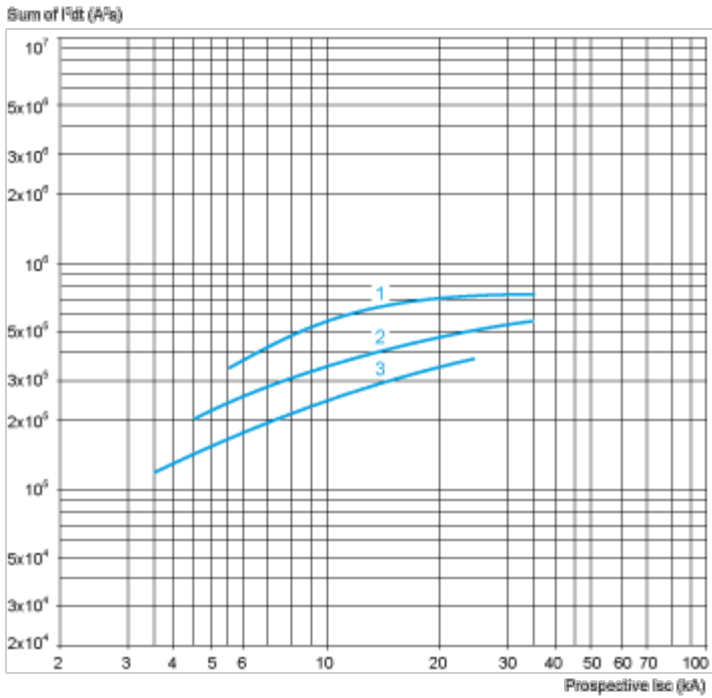
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

Thermal Limit (3-Phase 400/415 V)

Thermal Limit

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

For GV7RE only



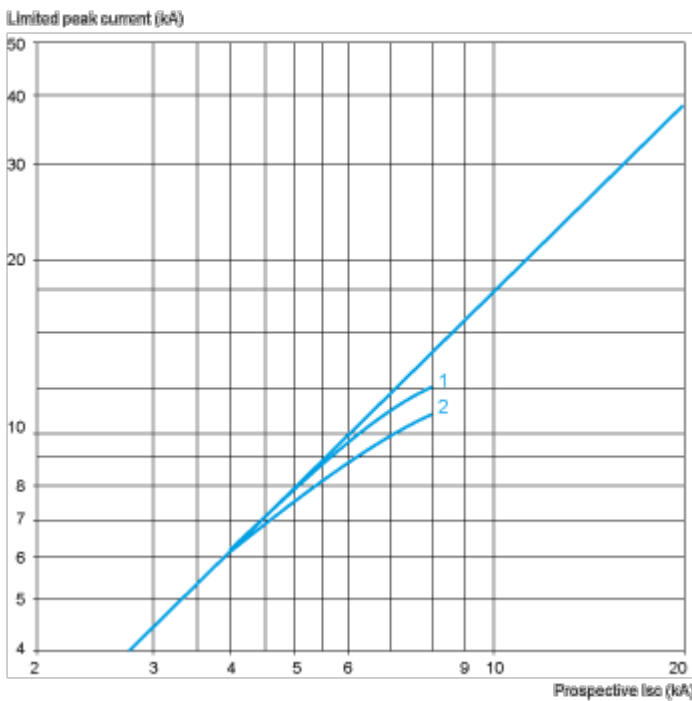
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

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

Dynamic Stress

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

For GV7RE only



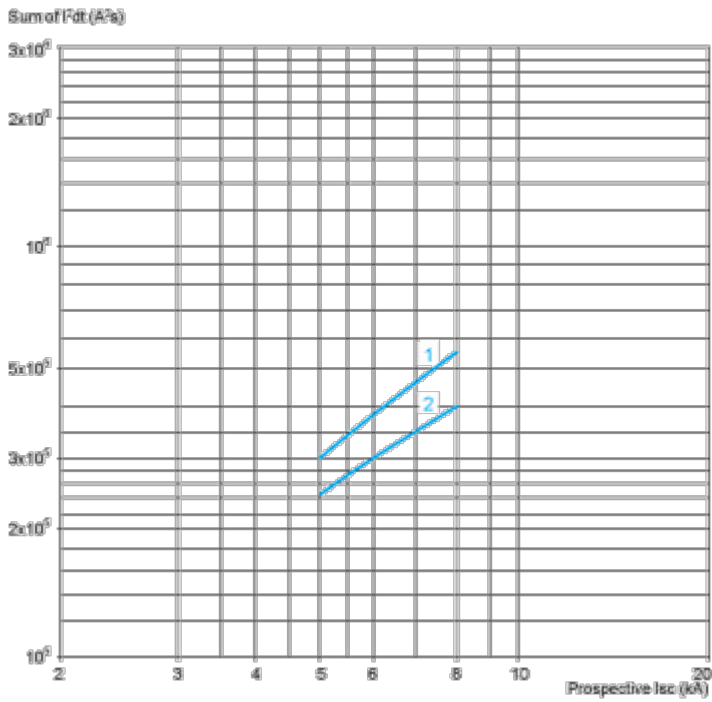
- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

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

Thermal Limit

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

For GV7RE only

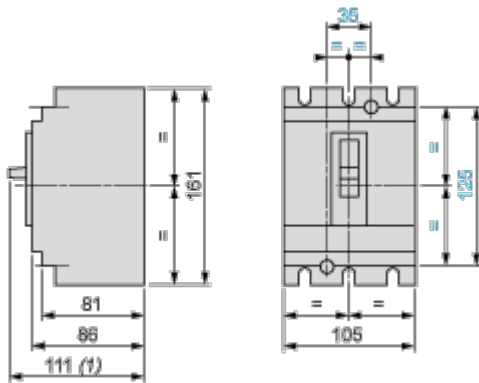


- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

Dimensions Drawings

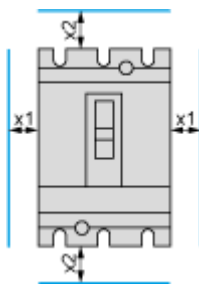
GV7R

Dimensions



(1) 126 for GV7R_220.

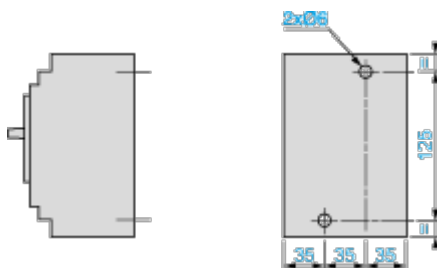
Minimum Electrical Clearance



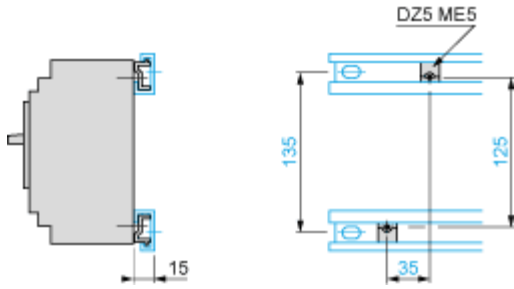
| | | x1 | x2 |
|---|-------------------------------------|----|----|
| Painted or insulated metal plate, insulation or insulated bar | | 0 | 30 |
| Bare metal plate | $U \leq 440 \text{ V}$ | 5 | 35 |
| | $440 \text{ V} < U < 600 \text{ V}$ | 10 | 35 |
| | $U \geq 600 \text{ V}$ | 20 | 35 |

GV7R

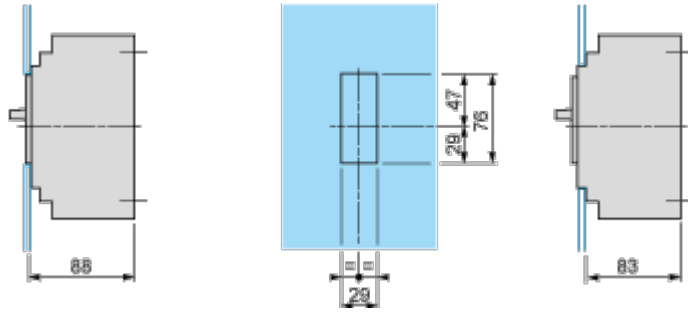
Panel Mounting



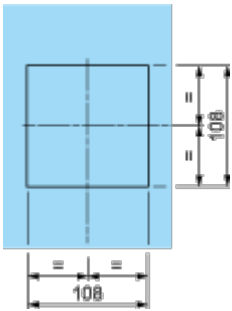
Mounting on 2 Mounting Rails DZ5 MB201



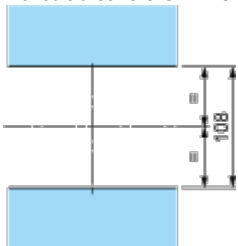
Flush-Mounting



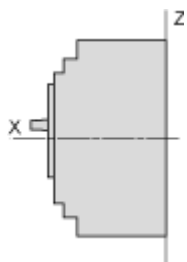
1 circuit breaker GV7R



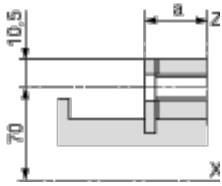
n circuit breakers GV7R side by side



Connection

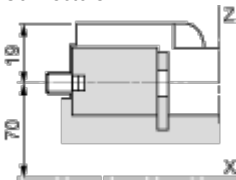


Smooth terminals



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

Connectors



Connections and Schema

Motor Circuit Breakers
GV7 R

