

# GV7RE150

TeSys GV7 Manual Starter and Protector,  
thermal magnetic circuit protector, rocker lever,  
3 P, AC-3, 90...150 A



## 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                                   | 35 KA Icu 440 V AC 50/60 Hz IEC 60947-2<br>85 KA Icu 220/240 V AC 50/60 Hz IEC 60947-2<br>35 KA Icu 380/415 V AC 50/60 Hz IEC 60947-2<br>25 KA Icu 500 V AC 50/60 Hz IEC 60947-2<br>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<br>100 % 220/240 V AC 50/60 Hz IEC 60947-2<br>100 % 380/415 V AC 50/60 Hz IEC 60947-2<br>50 % 500 V AC 50/60 Hz IEC 60947-2<br>50 % 660/690 V AC 50/60 Hz IEC 60947-2                      |
| Thermal protection adjustment range                 | 90...150 A                                                                                                                                                                                                                     |
| Trip unit technology                                | Thermal-magnetic                                                                                                                                                                                                               |

## Complementary

|                                             |                                                                                                                                                                                         |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting mode                               | By screws<br>By clips                                                                                                                                                                   |
| Mounting support                            | Flush<br>Rail<br>Panel mounting<br>Kit for fixing the switchgear                                                                                                                        |
| Mounting position                           | Vertical                                                                                                                                                                                |
| Motor power kW                              | 110 KW 660...690 V AC 50/60 Hz<br>55 KW 400...415 V AC 50/60 Hz<br>75 KW 400...415 V AC 50/60 Hz<br>75 KW 500 V AC 50/60 Hz<br>90 KW 500 V AC 50/60 Hz<br>90 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 | 150 A IEC 60947-4-1                                                                                                                                                                     |
| [Uimp] rated impulse withstand voltage      | 8 kV 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 AC-3 440 V In<br>40000 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<br>1.77 in (45 mm) with spreaders                                                                                                                     |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                           |                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Connections - terminals   | Bars<br>Cable with lug 0.39 in (10 mm)<br>Screw<br>Bare cable connectors 0.00...0.15 in <sup>2</sup> (1.5...95 mm <sup>2</sup> )       |
| Tightening torque         | 88.51 Lbf.in (10 N.m) screw M6<br>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> ) |
| Mechanical robustness     | Shocks 15 Gn for 11 ms IEC 60068-2-27<br>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                | 4.45 lb(US) (2.02 kg)                                                                                                                  |

## Environment

|                                       |                                                                                                                           |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Standards                             | NF C 79-130<br>EN/IEC 60947-1<br>EN/IEC 60947-4-1<br>VDE 0113<br>NF C 63-120<br>NF C 63-650<br>VDE 0660<br>EN/IEC 60947-2 |
| Product certifications                | DNV<br>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                  | 00785901566861                     |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 4.34 lb(US) (1.97 kg)              |
| Returnability         | No                                 |
| Country of origin     | CN                                 |

## Packing Units

|                  |                     |
|------------------|---------------------|
| Package 1 Height | 5.51 in (14.000 cm) |
| Package 1 width  | 5.51 in (14.000 cm) |
| Package 1 Length | 6.69 in (17.000 cm) |

## Offer Sustainability

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

## Contractual warranty

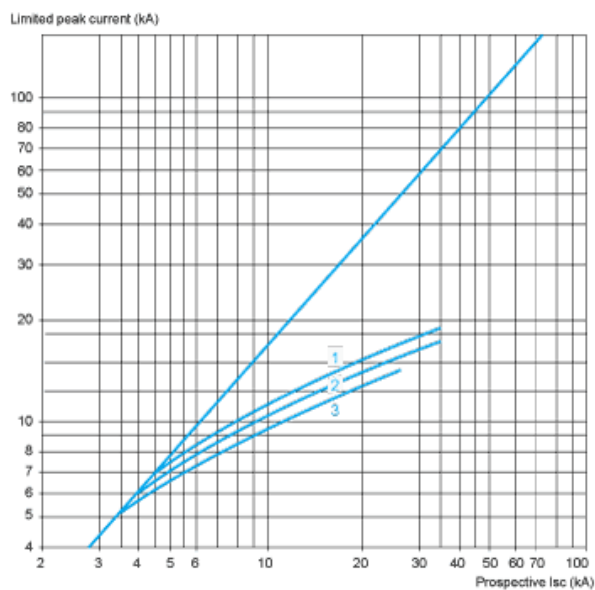
|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

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

Dynamic Stress

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

For GV7RE only



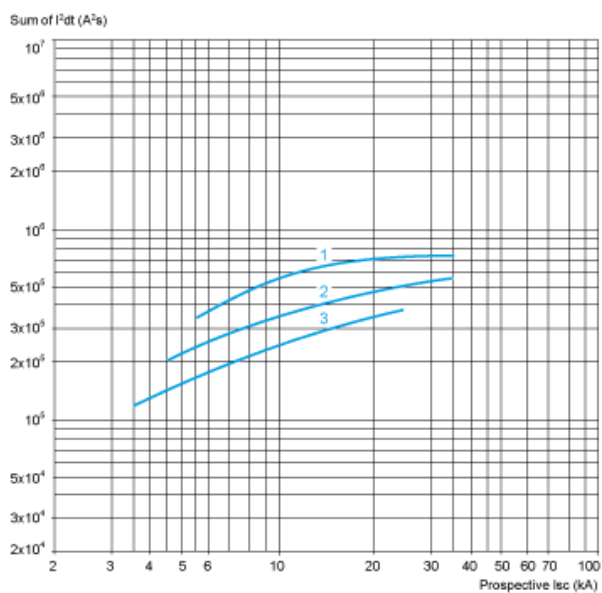
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

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

Thermal Limit

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

For GV7RE only



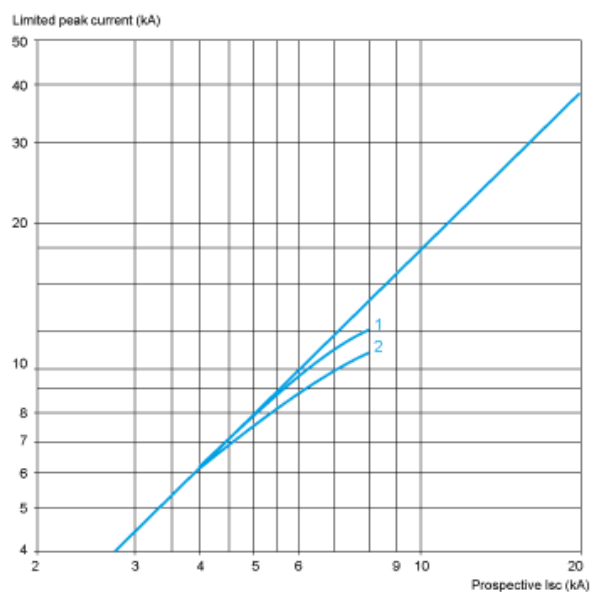
- 1 GV7RE220
- 2 GV7RE150
- 3 GV7RE100

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

Dynamic Stress

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

For GV7RE only



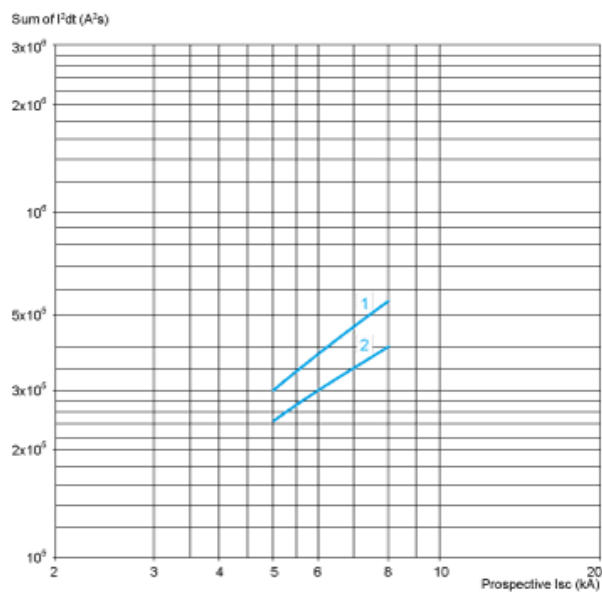
- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

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

Thermal Limit

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

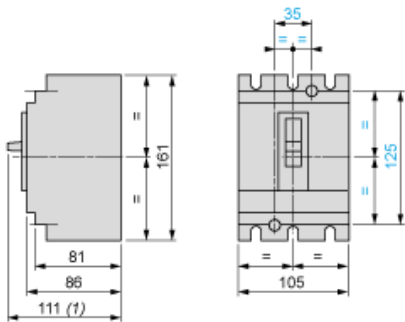
For GV7RE only



- 1 GV7RE220
- 2 GV7RE150 and GV7RE100

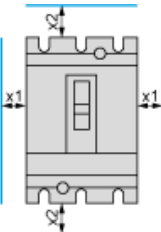
GV7R

Dimensions



(1) 126 for GV7R.220.

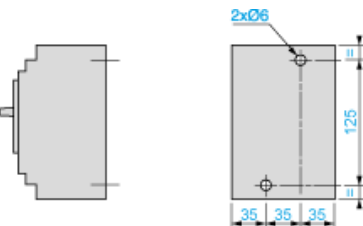
Minimum Electrical Clearance



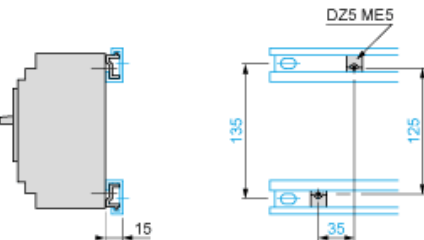
|                                                               |                        | x1 | x2 |
|---------------------------------------------------------------|------------------------|----|----|
| Painted or insulated metal plate, insulation or insulated bar |                        | 0  | 30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

GV7R

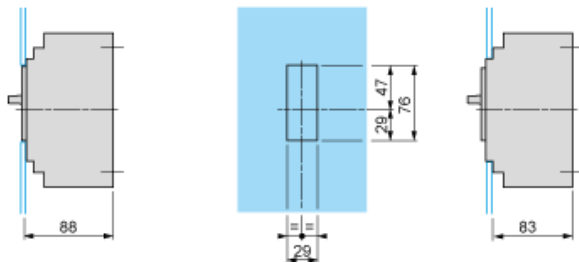
Panel Mounting



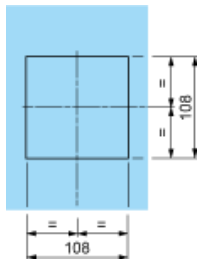
Mounting on 2 Mounting Rails DZ5 MB201



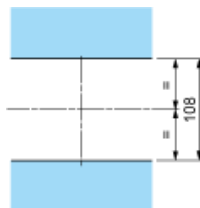
Flush-Mounting



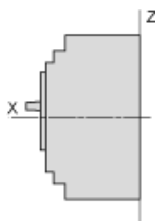
1 circuit breaker GV7R



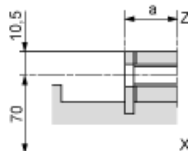
n circuit breakers GV7R side by side



## Connection

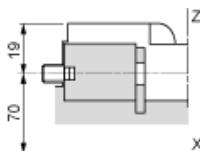


Smooth terminals



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

Connectors



## Motor Circuit Breakers

### GV7 R

