

# TeSys GV7 - circuit breaker - 3P - AC-3 - 12...20 A - thermal-magnetic

GV7RE20

#### (!) 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                                      | 35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>25 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>8 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ics] Rated Service Short-Circuit<br>Breaking Capacity | 100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>100 % at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>50 % at 660/690 V AC 50/60 Hz conforming to IEC 60947-2                      |
| Thermal Protection Adjustment Range                    | 1220 A                                                                                                                                                                                                                                                                                                              |
| Trip Unit Technology                                   | Thermal-magnetic                                                                                                                                                                                                                                                                                                    |

## Complementary

| Mounting Mode                  | By screws<br>By clips                       |
|--------------------------------|---------------------------------------------|
| Mounting Support               | Rail<br>Flush                               |
|                                | Kit for fixing the switchgear               |
|                                | Panel mounting                              |
| Mounting Position              | Vertical                                    |
| Motor Power Kw                 | 11 kW at 500 V AC 50/60 Hz                  |
|                                | 11 kW at 660/690 V AC 50/60 Hz              |
|                                | 15 kW at 660/690 V AC 50/60 Hz              |
|                                | 9 kW at 400/415 V AC 50/60 Hz               |
|                                | 9 kW at 500 V AC 50/60 Hz                   |
|                                | 7.5 kW at 400/415 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<br>Thermal Current | 20 A conforming to IEC 60947-4-1                                                                               |  |
| [Uimp] Rated Impulse Withstand Voltage         | 8 kV conforming to IEC 60947-2                                                                                 |  |
| Power Dissipation Per Pole                     | 5 W                                                                                                            |  |
| Power Dissipation Per Pole                     | 5 W                                                                                                            |  |
| Mechanical Durability                          | 50000 cycles                                                                                                   |  |
| Electrical Durability                          | 30000 cycles for AC-3 at 440 V In 50000 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<br>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<br>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                                                                                                         |  |
| Width  Depth                                   | 105 mm  111 mm                                                                                                 |  |

## **Environment**

| Standards                             | NF C 79-130<br>EN/IEC 60947-1<br>NF C 63-120<br>EN/IEC 60947-4-1<br>EN/IEC 60947-2<br>NF C 63-650<br>VDE 0113<br>VDE 0660 |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Product Certifications                | DNV<br>UL                                                                                                                 |
| Protective Treatment                  | TC                                                                                                                        |
| 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             | 11.5 cm  |
| Package 1 Width              | 15 cm    |
| Package 1 Length             | 17 cm    |
| Package 1 Weight             | 1.965 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 >



Transparency

Environmental Disclosure

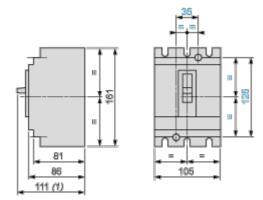
Not applicable, out of EU RoHS legal scope

Product Environmental Profile

## **Dimensions Drawings**

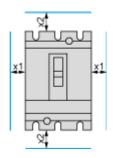
#### **GV7R**

#### **Dimensions**



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

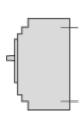
#### **Minimum Electrical Clearance**



|                                                               |                   |    | 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

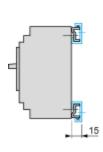
#### **Panel Mounting**

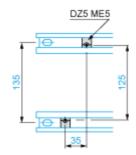




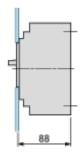
Mounting on 2 Mounting Rails DZ5 MB201

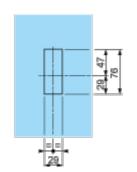
## **GV7RE20**

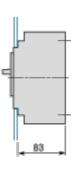




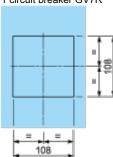
Flush-Mounting



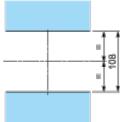




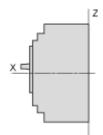
1 circuit breaker GV7R



n circuit breakers GV7R side by side



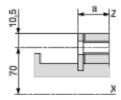
#### Connection



Smooth terminals

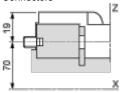
## **Product data sheet**

## **GV7RE20**



|                                        | а    |
|----------------------------------------|------|
| GV7R <sub>•</sub> 40R <sub>•</sub> 150 | 19.5 |
| GV7R <sub>e</sub> 220                  | 21.5 |

#### Connectors



## Connections and Schema

**Motor Circuit Breakers** 

