

## Main

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|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | TeSys                                                                                                                                                                                                                |
| Product name                   | TeSys GF                                                                                                                                                                                                             |
| Product or component type      | Impulse relay                                                                                                                                                                                                        |
| Device short name              | GF16                                                                                                                                                                                                                 |
| Utilisation category           | AC-1                                                                                                                                                                                                                 |
| Poles description              | 1P                                                                                                                                                                                                                   |
| Pole contact composition       | 1 NO                                                                                                                                                                                                                 |
| [Ie] rated operational current | 16 A AC-1                                                                                                                                                                                                            |
| [Ue] rated operational voltage | 250 V AC 50/60 Hz                                                                                                                                                                                                    |
| Permissible short-time rating  | 96 A ( $\leq 40^\circ\text{C}$ ) - short time current duration: 10 s<br>48 A ( $\leq 40^\circ\text{C}$ ) - short time current duration: 30 s<br>320 A ( $\leq 40^\circ\text{C}$ ) - short time current duration: 1 s |
| Operating position             | +/- $90^\circ$ to vertical plane                                                                                                                                                                                     |
| Control circuit type           | AC 50/60 Hz                                                                                                                                                                                                          |
| Control circuit voltage        | 220 V AC 50/60 Hz                                                                                                                                                                                                    |
| Mounting mode                  | Clip-on                                                                                                                                                                                                              |
| Mounting support               | 35 mm symmetrical DIN rail                                                                                                                                                                                           |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| [Ith] conventional free air thermal current | 16 A at $\leq 50^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Average impedance                           | 4 mOhm at 50 Hz - Ith 16 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ui] rated insulation voltage               | 400 V - conforming to VDE 0110<br>400 V - conforming to IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [Uimp] rated impulse withstand voltage      | 4 kV in enclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connections - terminals                     | Power circuit : screw clamp terminals 2 cable 0.5...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : screw clamp terminals 2 cable 0.5...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : screw clamp terminals 2 cable 0.5...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : screw clamp terminals 1 cable 0.5...6 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : screw clamp terminals 1 cable 0.5...6 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : screw clamp terminals 1 cable 0.5...6 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 2 cable 2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 2 cable 1.5 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 2 cable 1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 1 cable 2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 1 cable 2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 1 cable 1.5 mm <sup>2</sup> - cable stiffness: solid - without cable end |
| Tightening torque                           | Power circuit : 0.8 N.m - on screw clamp terminals<br>Control circuit : 0.8 N.m - on screw clamp terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Operating time                              | 70 ms opening<br>70 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating rate                              | $\leq 900$ cyc/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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|--------------------------------|--------------------------------------------------|
| Control circuit voltage limits | 0.85...1.1 Uc at ≤ 50 °C 50/60 Hz                |
| Impulse duration               | ≥ 70 ms                                          |
| Average consumption            | 19 VA for AC network 50 Hz at Uc at 20 °C        |
| Power dissipation per pole     | 1 W                                              |
| Mechanical durability          | 1 Mcycles                                        |
| Electrical durability          | 200000 cycles on AC-21<br>100000 cycles on AC-22 |
| Height                         | 81 mm                                            |
| Width                          | 18 mm                                            |
| Depth                          | 64 mm                                            |
| Product weight                 | 0.11 kg                                          |
| Quantity per set               | Set of 12                                        |

## Environment

|                                       |                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------|
| Standards                             | IEC 60669-1<br>IEC 60669-2<br>NF C 61-112                                                  |
| IP degree of protection               | IP20 conforming to VDE 0106<br>IP40 in enclosure conforming to VDE 0106                    |
| Protective treatment                  | TC                                                                                         |
| Ambient air temperature for operation | -20...50 °C                                                                                |
| Ambient air temperature for storage   | -40...80 °C                                                                                |
| Operating altitude                    | ≤ 2000 m without derating                                                                  |
| Mechanical robustness                 | Vibrations contactor closed 4 Gn, 5...300 Hz<br>Vibrations contactor open 4 Gn, 5...300 Hz |