GV2ME16
Motor circuit breaker, TeSys GV2, 3P, 9-14 A, thermal magnetic, screw clamp terminals

Main
Range
TeSys
Product name
TeSys GV2
Device short name
GV2ME
Device application
Motor
Trip unit technology
Thermal-magnetic

Complementary
Poles description
3P
Network type
AC
Utilisation category
AC-3 conforming to IEC 60947-4-1
Category A conforming to IEC 60947-2
Network frequency
50/60 Hz conforming to IEC 60947-4-1
Fixing mode
35 mm symmetrical DIN rail: clipped
Panel: screwed (with adaptor plate)
Operating position
Any position
Motor power kW
5.5 kW at 400/415 V AC 50/60 Hz
7.5 kW at 500 V AC 50/60 Hz
9 kW at 690 V AC 50/60 Hz
11 kW at 690 V AC 50/60 Hz
Breaking capacity
100 kA Icu at 230/240 V AC 50/60 Hz conforming to IEC 60947-2
3 kA Icu at 690 V AC 50/60 Hz conforming to IEC 60947-2
15 kA Icu at 400/415 V AC 50/60 Hz conforming to IEC 60947-2
8 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2
6 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2
[Ics] rated service short-circuit breaking capacity
100 % at 230/240 V AC 50/60 Hz conforming to IEC 60947-2
75 % at 690 V AC 50/60 Hz conforming to IEC 60947-2
75 % at 500 V AC 50/60 Hz conforming to IEC 60947-2
50 % at 400/415 V AC 50/60 Hz conforming to IEC 60947-2
50 % at 440 V AC 50/60 Hz conforming to IEC 60947-2
Control type
Push-button
[In] rated current
14 A

Disclaimer: 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.
| **Thermal protection adjustment range** | 9…14 A |
| **Magnetic tripping current** | 170 A |
| **[Ue] rated operational voltage** | 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **[Ui] rated insulation voltage** | 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **[Ith] conventional free air thermal current** | 14 A conforming to IEC 60947-4-1 |
| **[Uimp] rated impulse withstand voltage** | IEC 60947-2 6 kV |
| **Power dissipation per pole** | 2.5 W |
| **Mechanical durability** | 100000 cycles |
| **Electrical durability** | 100000 cycles for AC-3 at 440 V |
| **Maximum operating rate** | 25 cyc/h |
| **Rated duty** | Continuous conforming to IEC 60947-4-1 |
| **Connections - terminals** | Screw clamp terminals 2 cable(s) 1…6 mm² solid |
| | Screw clamp terminals 2 cable(s) 1.5…6 mm² flexible without cable end |
| | Screw clamp terminals 2 cable(s) 1…4 mm² flexible with cable end |
| **Tightening torque** | 1.7 N.m on screw clamp terminals |
| **Suitability for isolation** | Yes conforming to IEC 60947-1 |
| **Phase failure sensitivity** | Yes conforming to IEC 60947-4-1 |
| **Height** | 89 mm |
| **Width** | 45 mm |
| **Depth** | 78.5 mm |
| **Net weight** | 0.26 kg |

### Environment

**Standards**

EN/IEC 60947-2  
EN/IEC 60947-4-1  
CSA C22.2 No 60947-4-1  
UL 60947-4-1

**Product certifications**

IECEE CB Scheme  
UL  
CSA  
CCC  
EAC  
ATEX  
BV  
LROS (Lloyds register of shipping)  
DNV-GL  
RINA

**Protective treatment**

TH

**IP degree of protection**

IP20 conforming to IEC 60529

**IK degree of protection**

IK04

**Ambient air temperature for operation**

-20...60 °C

**Ambient air temperature for storage**

-40...80 °C

**Fire resistance**

960 °C conforming to IEC 60695-2-1

**Operating altitude**

2000 m

### Offer Sustainability

**Sustainable offer status**

Green Premium product

**REACH Regulation**

REACH Declaration

**EU RoHS Directive**

Compliant  
EU RoHS Declaration

**Mercury free**

Yes

**RoHS exemption information**

Yes

**China RoHS Regulation**

China RoHS declaration  
Product out of China RoHS scope. Substance declaration for your information

**Environmental Disclosure**

Product Environmental Profile

**Circularity Profile**

No need of specific recycling operations
### WEEE
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

### Contractual warranty

<table>
<thead>
<tr>
<th>Warranty</th>
<th>18 months</th>
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Thermal-Magnetic Tripping Curves for GV2ME and GV2P
Average Operating Times at 20 °C Related to Multiples of the Setting Current

1. 3 poles from cold state
2. 2 poles from cold state
3. 3 poles from hot state

Current Limitation on Short-Circuit for GV2ME and GV2P (3-Phase 400/415 V)
Dynamic Stress
I_{peak} = f (prospective Isc) at 1.05 Ue = 435 V
1. Maximum peak current
2. 24-32 A
3. 20-25 A
4. 17-23 A
5. 13-18 A
6. 9-14 A
7. 6-10 A
8. 4-6.3 A
9. 2.5-4 A
10. 1.6-2.5 A
11. 1-1.6 A

Thermal Limit on Short-Circuit for GV2ME

Thermal Limit in kA²s in the Magnetic Operating Zone
Sum of $\int I^2 dt = f$ (prospective Isc) at 1.05 Ue = 435 V
1  24-32 A
2  20-25 A
3  17-23 A
4  13-18 A
5  9-14 A
6  6-10 A
7  4-6.3 A
8  2.5-4 A
9  1.6-2.5 A
10 1-1.6 A
Dimension
GV2ME

<table>
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<tr>
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<tr>
<td>GV2ME</td>
<td>89</td>
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<tr>
<td>GV2ME 3</td>
<td>101</td>
</tr>
</tbody>
</table>

Mounting
GV2ME
On 35 mm rail

- c = 78.5 on AM1 DP200 (35 x 7.5)
- c = 86 on AM1 DE200, ED200 (35 x 15)

On panel with adapter plate GV2AF02

On pre-slotted plate AM1 PA

On rails DZ5 MB201
GV2AF01
Combination GV2ME + TeSys k contactor

GV2AF3
Combination GV2ME + TeSys d contactor

<table>
<thead>
<tr>
<th></th>
<th>LC1D09…D18</th>
<th>LC1D25 and D32</th>
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<tr>
<td>b</td>
<td>176.4</td>
<td>186.8</td>
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<tr>
<td>c1</td>
<td>94.1</td>
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<td>c</td>
<td>99.6</td>
<td>105.9</td>
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GV2AF4 + LAD311
Combination GV2ME + TeSys d contactor

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<tr>
<td>d1</td>
<td>107</td>
<td>107</td>
</tr>
<tr>
<td>d</td>
<td>112.5</td>
<td>112.5</td>
</tr>
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GV2ME + GV1L3 (Current Limiter)
$X_1 = 10 \text{ mm for } U_e = 230 \text{ V or 30 mm for } 230 \text{ V} < U_e \leq 690 \text{ V}$
GV2ME•• and GV2RT

Connection of Undervoltage Trip for Dangerous Machines (Conforming to INRS) on GV2ME Only