# Product data sheet

Specifications



## TeSys Deca Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 2.5 to 4 A, screw clamp

GV2ME08

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range** | TeSys Deca |
| **Product name** | TeSys GV2 |
| **Product or Component Type** | Motor circuit breaker |
| **Device short name** | GV2ME |
| **Device Application** | Motor protection |
| **Trip unit technology** | Thermal-magnetic |

## Complementary

| | |
|---|---|
| **Poles description** | 3P |
| **Network type** | AC |
| **Utilisation category** | Category A IEC 60947-2<br>AC-3 IEC 60947-4-1<br>AC-3e IEC 60947-4-1 |
| **Network frequency** | 50/60 Hz IEC 60947-2 |
| **Motor power kW** | 1.1 kW 400/415 V AC 50/60 Hz<br>1.5 kW 400/415 V AC 50/60 Hz<br>1.5 kW 500 V AC 50/60 Hz<br>2.2 kW 500 V AC 50/60 Hz<br>3 kW 690 V AC 50/60 Hz<br>2.2 kW 690 V AC 50/60 Hz |
| **Breaking capacity** | 100 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 440 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 500 V AC 50/60 Hz IEC 60947-2<br>3 kA Icu 690 V AC 50/60 Hz IEC 60947-2 |
| **[Ics] rated service short-circuit breaking capacity** | 100 % 230/240 V AC 50/60 Hz IEC 60947-2<br>100 % 400/415 V AC 50/60 Hz IEC 60947-2<br>100 % 440 V AC 50/60 Hz IEC 60947-2<br>100 % 500 V AC 50/60 Hz IEC 60947-2<br>75 % 690 V AC 50/60 Hz IEC 60947-2 |
| **Control Type** | Push-button |
| **Line Rated Current** | 4 A |
| **Thermal protection adjustment range** | 2.5…4 A IEC 60947-2 |
| **Magnetic tripping current** | 74 A |
| **[Ith] conventional free air thermal current** | 4 A IEC 60947-2 |
| **[Ue] rated operational voltage** | 690 V AC 50/60 Hz IEC 60947-2 |
| **[Ui] rated insulation voltage** | 690 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.

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

| | |
|---|---|
| **[Uimp] rated impulse withstand voltage** | 6 kV IEC 60947-2 |
| **Phase failure sensitivity** | Yes IEC 60947-4-1 |
| **Suitability for isolation** | Yes IEC 60947-1 |
| **Power dissipation per pole** | 2.5 W |
| **Mechanical durability** | 100000 cycles |
| **Electrical durability** | 100000 cycles AC-3 415 V In<br>100000 cycles AC-3e 415 V In |
| **Rated duty** | Uninterrupted IEC 60947-4-1 |
| **Connections - terminals** | Power circuit: screw clamp terminal 2 cable(s) 0.002…0.009 in² (1…6 mm²) - solid<br>Power circuit: screw clamp terminal 2 cable(s) 0.002…0.009 in² (1.5…6 mm²) - flexible without cable end<br>Power circuit: screw clamp terminal 2 cable(s) 0.002…0.006 in² (1…4 mm²) - flexible with cable end |
| **Tightening torque** | 15.05 lbf.in (1.7 N.m) screw clamp terminal |
| **Fixing mode** | 35 mm symmetrical DIN rail clipped<br>Panel screwed with adaptor plate) |
| **Mounting position** | Horizontal<br>Vertical |
| **Width** | 1.8 in (45 mm) |
| **Height** | 3.5 in (89 mm) |
| **Depth** | 3.09 in (78.5 mm) |
| **Net Weight** | 0.57 lb(US) (0.26 kg) |
| **color** | Dark grey |

# Environment

| | |
|---|---|
| **Standards** | EN/IEC 60947-2<br>EN/IEC 60947-4-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>IEC/EN 60335-2-40:Annex JJ<br>IEC/EN 60335-1:Clause 30.2 |
| **Product Certifications** | CB Scheme<br>CE<br>UKCA<br>CCC<br>cULus<br>EAC<br>ATEX<br>LROS (Lloyds register of shipping)<br>BV<br>RINA<br>DNV-GL |
| **IK degree of protection** | IK04 |
| **IP degree of protection** | IP20 IEC 60529 |
| **Climatic withstand** | IACS E10 |
| **Ambient Air Temperature for Storage** | -40…176 °F (-40…80 °C) |
| **Fire resistance** | 1760 °F (960 °C) IEC 60695-2-11 |
| **Ambient air temperature for operation** | -4…140 °F (-20…60 °C) |
| **Mechanical robustness** | Shocks 30 Gn for 11 ms<br>Vibrations 5 Gn, 5...150 Hz |
| **Operating altitude** | <= 6561.68 ft (2000 m) |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US1CTR121253 |
| **Discount Schedule** | CTR1 |
| **GTIN** | 3389110343090 |
| **Returnability** | Yes |
| **Country of origin** | TH |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 1.890 in (4.800 cm) |
| **Package 1 Width** | 3.346 in (8.500 cm) |
| **Package 1 Length** | 3.661 in (9.300 cm) |
| **Package weight(Lbs)** | 8.995 oz (255.000 g) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 24 |
| **Package 2 Height** | 5.906 in (15.000 cm) |
| **Package 2 Width** | 11.811 in (30.000 cm) |
| **Package 2 Length** | 15.748 in (40.000 cm) |
| **Package 2 Weight** | 14.140 lb(US) (6.414 kg) |
| **Unit Type of Package 3** | P06 |
| **Number of Units in Package 3** | 384 |
| **Package 3 Height** | 29.528 in (75.000 cm) |
| **Package 3 Width** | 23.622 in (60.000 cm) |
| **Package 3 Length** | 31.496 in (80.000 cm) |
| **Package 3 Weight** | 240.816 lb(US) (109.232 kg) |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Total lifecycle Carbon footprint | **11 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **2 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.1 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **9 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **0.5 kg CO2 eq.** |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **Yes** |
| SCIP Number | **04104e70-ba29-493c-b2cc-b5837d1f879b** |
| EU RoHS Directive | Compliant By Exemption |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| California proposition 65 | **WARNING: This product can expose you to chemicals including: Antimony oxide &amp Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov** |
| POP Directive | No POPs |

## Use Again

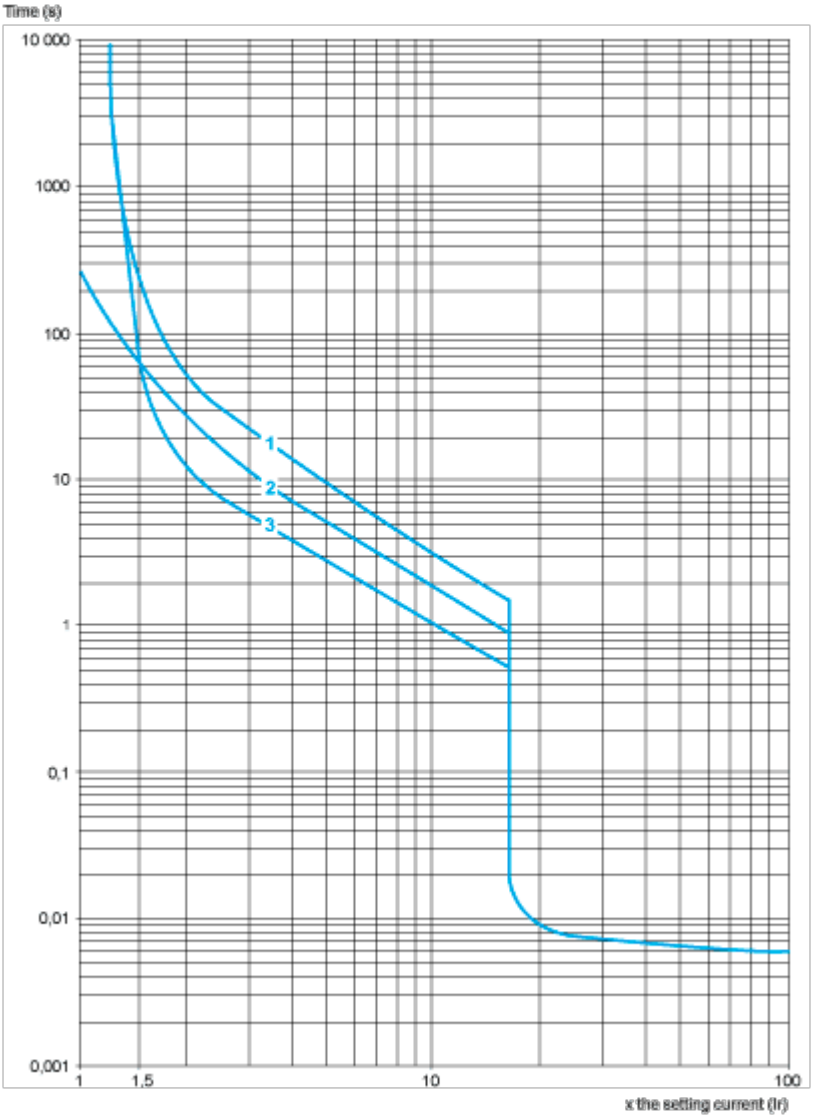
### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **49** |
| Circularity Profile | End of Life Information |
| Take-back | **No** |
| WEEE Label | **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.** |

Performance Curves

### 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

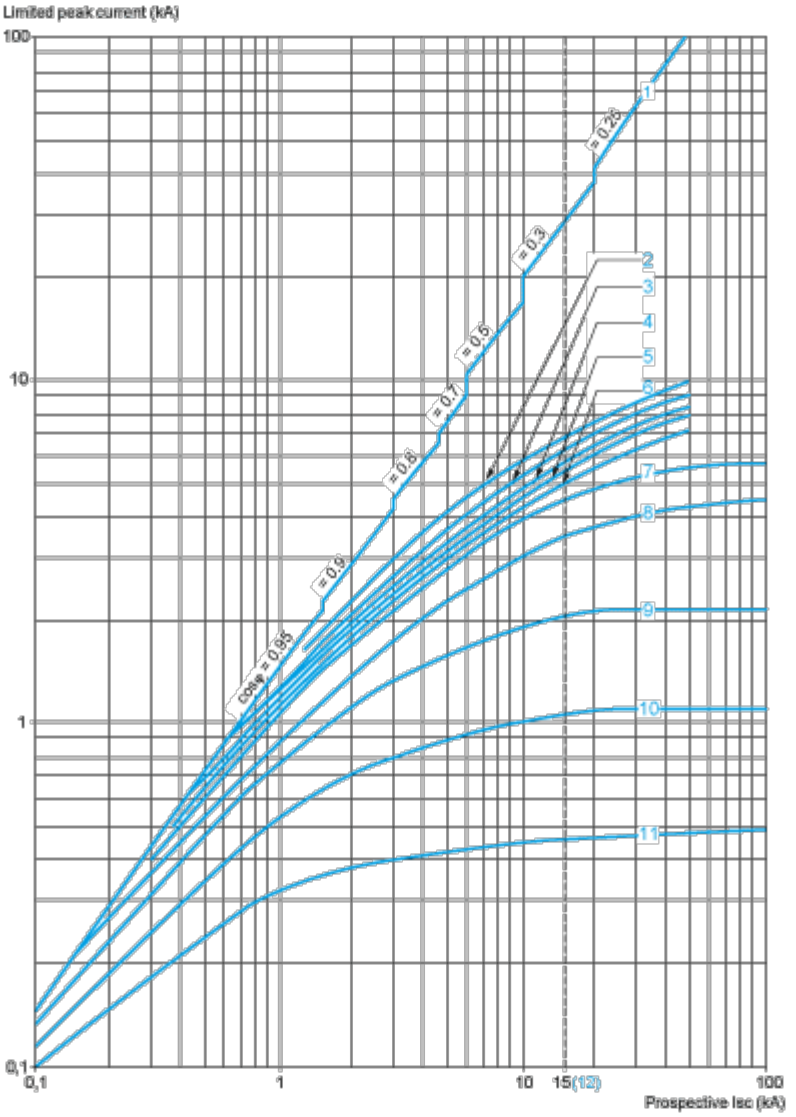
2 2 poles from cold state

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

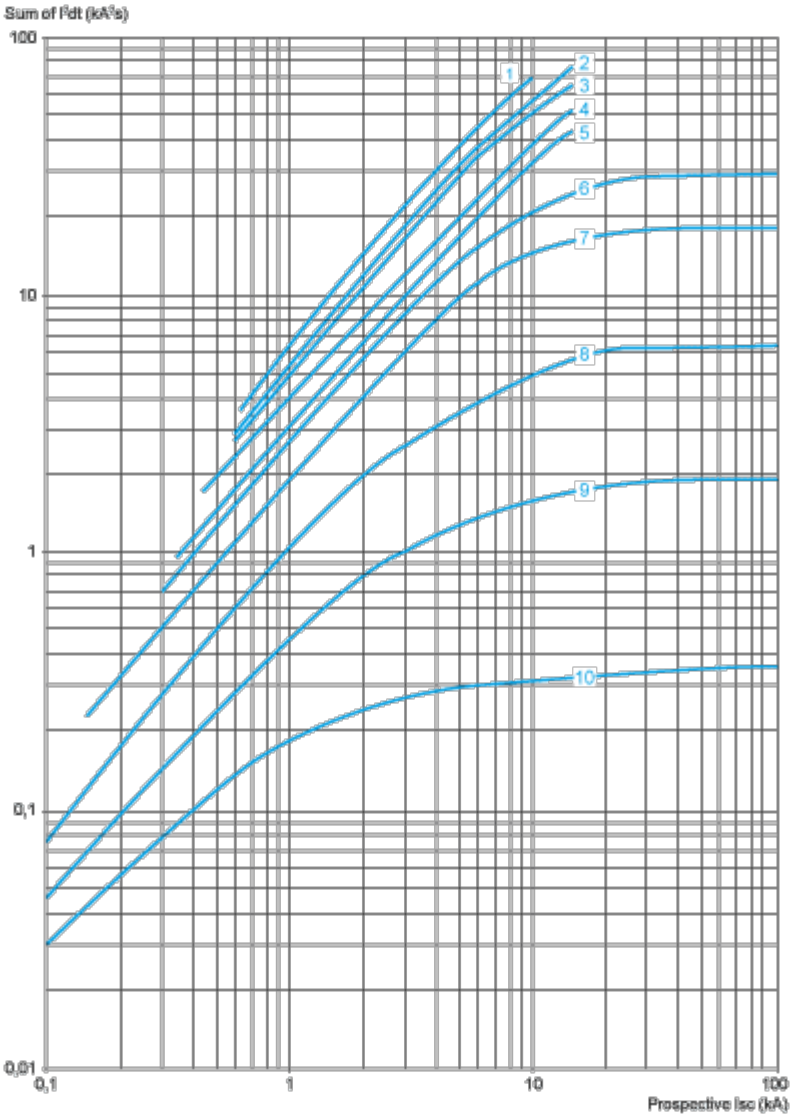
11 1-1.6 A

12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23, and 25 A ratings).

## Thermal Limit on Short-Circuit for GV2ME

### Thermal Limit in $kA^2s$ in the Magnetic Operating Zone

Sum of $I^2dt$ = 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

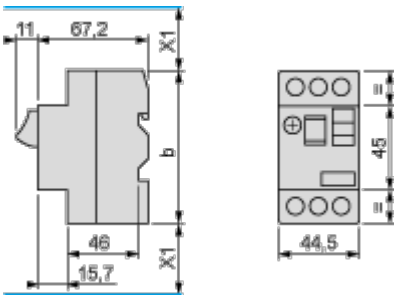
9 1.6-2.5 A

10 1-1.6 A

## Dimensions Drawings

### Dimension

**GV2ME**




(1) Maximum

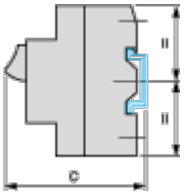
X1 Electrical clearance = 40 mm for Ue ≤ 690 V

| | b |
|---|---|
| GV2ME•• | 89 |
| GV2ME••3 | 101 |

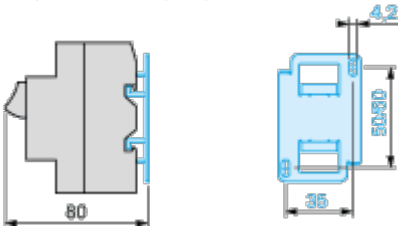
### Mounting

**GV2ME**

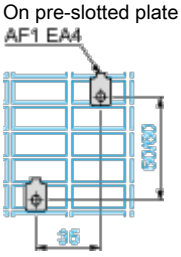
On 35 mm rail



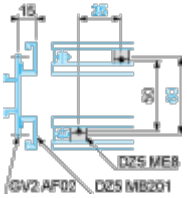

c = 78.5 on AM1 DP200 (35 x 7.5)
c = 86 on AM1 DE200, ED200 (35 x 15)
On panel with adapter plate GV2AF02



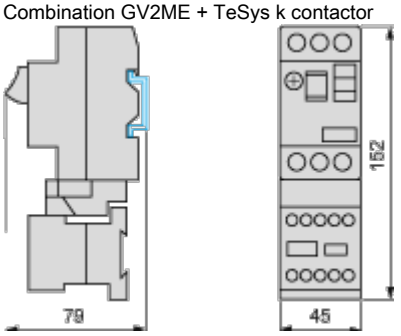

On pre-slotted plate AM1 PA



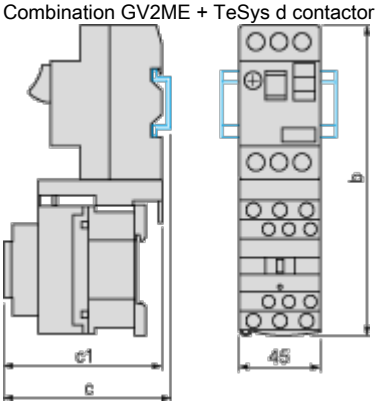

On rails DZ5 MB201




**GV2AF01**
Combination GV2ME + TeSys k contactor

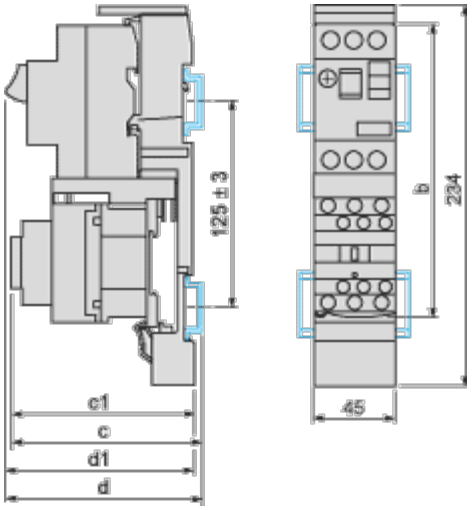



**GV2AF3**
Combination GV2ME + TeSys d contactor



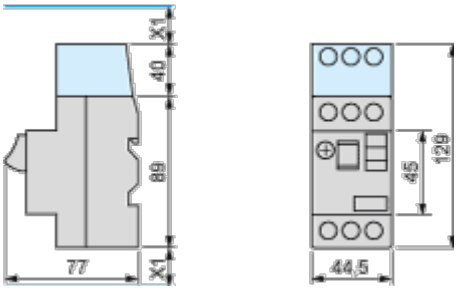

| GV2ME + | LC1D09…D18 | LC1D25 and D32 |
|---|---|---|
| b | 176.4 | 186.8 |
| c1 | 94.1 | 100.4 |
| c | 99.6 | 105.9 |

**GV2AF4 + LAD311**
Combination GV2ME + TeSys d contactor




| GV2ME + | LC1D09…D18 | LC1D25 and D32 |
|---|---|---|
| b | 176.4 | 186.8 |
| c1 | 103.1 | 136.4 |
| c | 135.6 | 141.9 |
| d1 | 107 | 107 |
| d | 112.5 | 112.5 |

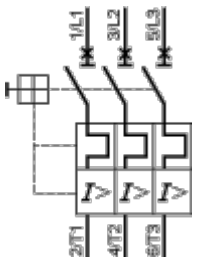
**GV2ME + GV1L3 (Current Limiter)**




X1 = 10 mm for Ue = 230 V or 30 mm for 230 V < Ue ≤ 690 V

## Connections and Schema

**GV2ME•• and GV2RT**




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

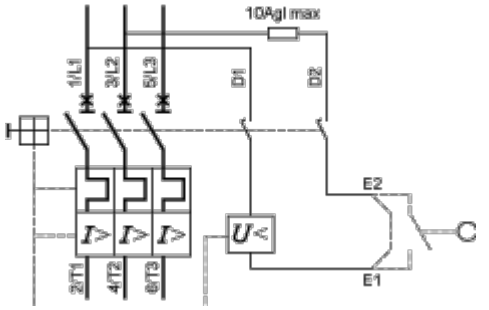


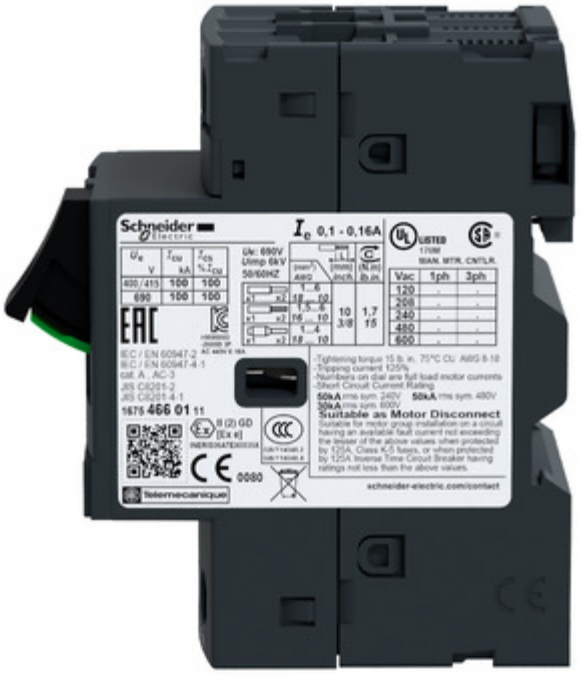
Image of product / Alternate images

**Alternative**








Schneider Electric
$I_D$ 0,1 - 0,16A
Suitable as Motor Disconnect
Telemecanique