# Product datasheet

Specifications

## TeSys GV3P thermal-magn motor circuit breaker 70-80A EverLink

GV3P80

**EAN Code: 3606481304568**

## Main

| | |
|---|---|
| **Range** | TeSys Deca |
| **Product name** | TeSys GV3 |
| **Product or component type** | Motor circuit breaker |
| **Device short name** | GV3P |
| **Device application** | Motor protection |
| **Trip unit technology** | Thermal-magnetic |

## Complementary

| | |
|---|---|
| **Poles description** | 3P |
| **Network type** | AC |
| **Utilisation category** | Category A conforming to IEC 60947-2<br>AC-3 conforming to IEC 60947-4-1 |
| **Network frequency** | 50/60 Hz conforming to IEC 60947-2 |
| **Motor power kW** | 45 kW at 400/415 V AC 50/60 Hz maximum peak current 750 A<br>45 kW at 500 V AC 50/60 Hz maximum peak current 750 A<br>55 kW at 690 V AC 50/60 Hz maximum peak current 750 A |
| **Breaking capacity** | 65 kA Icu at 230/240 V AC 50/60 Hz<br>50 kA Icu at 400/415 V AC 50/60 Hz<br>50 kA Icu at 440 V AC 50/60 Hz<br>12 kA Icu at 500 V AC 50/60 Hz<br>6 kA Icu at 690 V AC 50/60 Hz |
| **[Ics] rated service short-circuit breaking capacity** | 100 % at 230/240 V AC 50/60 Hz<br>60 % at 400/415 V AC 50/60 Hz<br>60 % at 440 V AC 50/60 Hz<br>50 % at 500 V AC 50/60 Hz<br>50 % at 690 V AC 50/60 Hz |
| **Control type** | Rotary handle |
| **[In] rated current** | 80 A |
| **Thermal protection adjustment range** | 70…80 A conforming to IEC 60947-2 |
| **Magnetic tripping current** | 1120 A |
| **[Ith] conventional free air thermal current** | 80 A conforming to IEC 60947-2 |
| **[Ue] rated operational voltage** | 690 V AC 50/60 Hz |
| **[Ui] rated insulation voltage** | 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **[Uimp] rated impulse withstand voltage** | 6 kV conforming to IEC 60947-2 |
| **Phase failure sensitivity** | Yes conforming to IEC 60947-4-1 |
| **Suitability for isolation** | Yes conforming to IEC 60947-1 |

| | |
|---|---|
| **Power dissipation per pole** | 8 W |
| **Mechanical durability** | 50000 cycles |
| **Electrical durability** | 20000 cycles for AC-3 at 415 V In |
| **Rated duty** | Uninterrupted conforming to IEC 60947-4-1 |
| **Tightening torque** | 5 N.m - on screw clamp terminal |
| **Fixing mode** | 35 mm symmetrical DIN rail: clipped<br>Panel: screwed (with 3 x M4 screws) |
| **Mounting position** | Horizontal<br>Vertical |
| **Width** | 55 mm |
| **Height** | 132 mm |
| **Depth** | 136 mm |
| **Net weight** | 0.96 kg |
| **Colour** | Dark grey |

## Environment

| | |
|---|---|
| **Standards** | EN/IEC 60947-2<br>EN/IEC 60947-4-1<br>IEC/EN 60335-1:Clause 30.2<br>IEC/EN 60335-2-40:Annex JJ |
| **Product certifications** | CCC<br>CSA<br>EAC<br>ATEX<br>LROS (Lloyds register of shipping)<br>BV<br>ABS<br>DNV-GL<br>UKCA |
| **IK degree of protection** | IK09 enclosure |
| **IP degree of protection** | IP20 conforming to IEC 60529 |
| **Climatic withstand** | conforming to IACS E10 |
| **Ambient air temperature for storage** | -40…80 °C |
| **Fire resistance** | 960 °C conforming to IEC 60695-2-11 |
| **Ambient air temperature for operation** | -20…60 °C |
| **Mechanical robustness** | Shocks: 5 Gn for 11 ms contactor open<br>Shocks: 30 Gn for 11 ms contactor closed<br>Vibrations: 4 Gn, 5...300 Hz |
| **Operating altitude** | 3000 m |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 6.500 cm |
| **Package 1 Width** | 14.500 cm |
| **Package 1 Length** | 16.000 cm |
| **Package 1 Weight** | 1.020 kg |
| **Unit Type of Package 2** | S06 |

| | |
|---|---|
| **Number of Units in Package 2** | 120 |
| **Package 2 Height** | 75.000 cm |
| **Package 2 Width** | 60.000 cm |
| **Package 2 Length** | 80.000 cm |
| **Package 2 Weight** | 135.500 kg |

## Logistical informations

| | |
|---|---|
| **Country of origin** | FR |

## 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 | 30 |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| EU RoHS Directive | Compliant with Exemptions |
| SCIP Number | 2057c252-f956-4ac1-a3d9-75119bc8a000 |
| REACh Regulation | REACh Declaration |

## Use Longer

### Lifetime extension

| | |
|---|---|
| Repair | No |

## Use Again

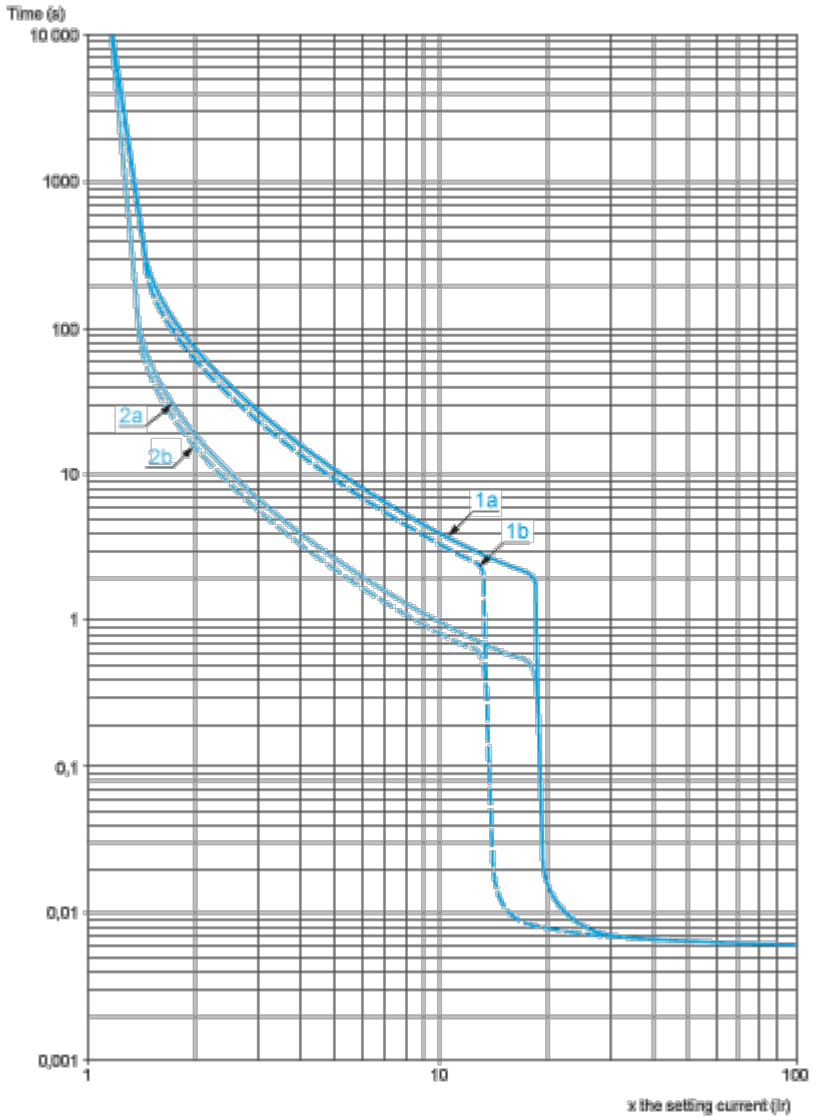
### Repack and remanufacture

| | |
|---|---|
| End of life manual availability | 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

**Average Operating Times at 20 °C Related to Multiples of the Setting Current**




1a 3 poles from cold state (Ir minimum): GV3P

1b 3 poles from cold state (Ir maximum): GV3P

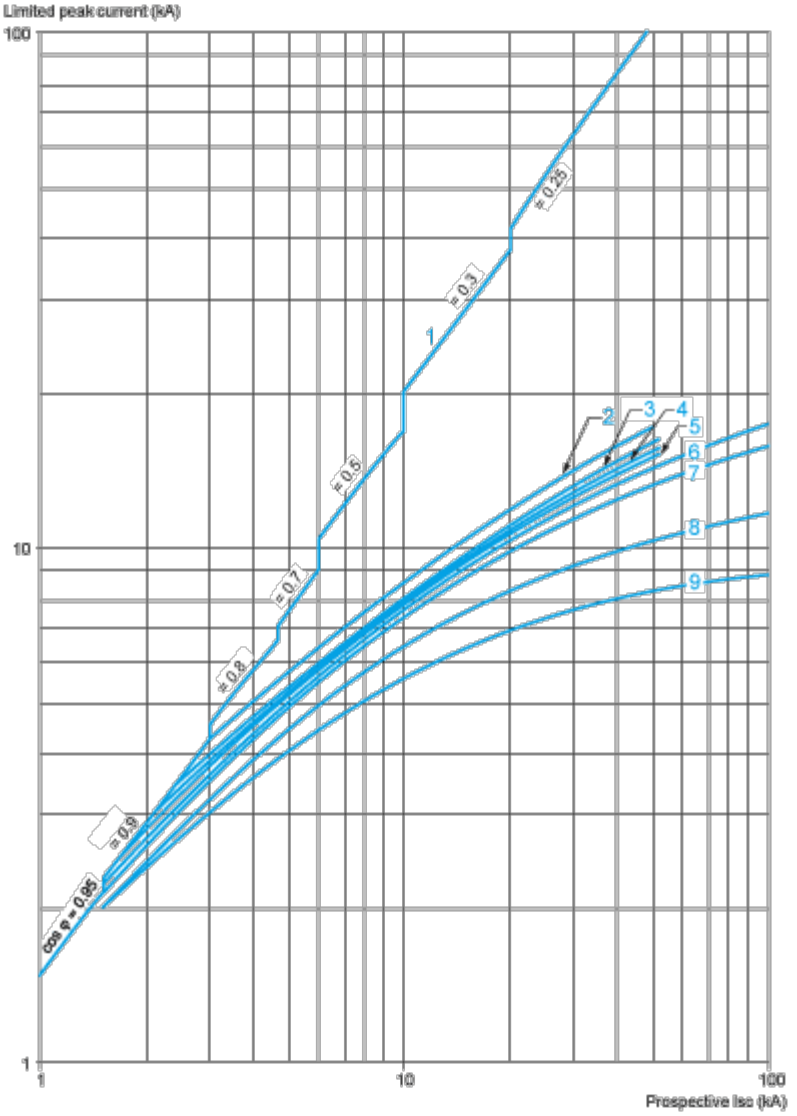
2a 3 poles from hot state (Ir minimum): GV3P

2b 3 poles from hot state (Ir maximum): GV3P

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

**Dynamic Stress**

I peak = f (prospective Isc) at 1.05 Ue = 435 V




1 Maximum peak current

2 70-80 A (GV3P80), 62-73 A (GV3P73)

3 48-65 A (GV3P65)

4 37-50 A (GV3P50)

5 30-40 A (GV3P40)

6 23-32 A (GV3P32)

7 17-25 A (GV3P25)

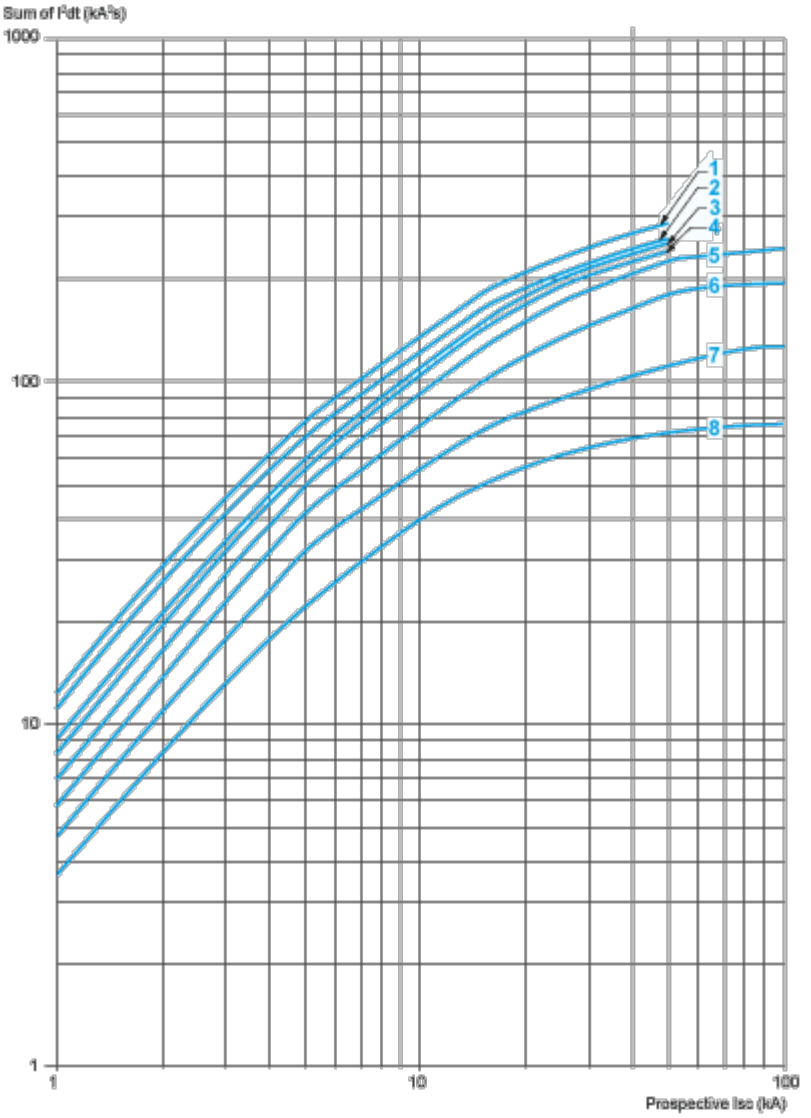
8 12-18 A (GV3P18)

9 9-13 A (GV3P13)

## Maximum Thermal Limit on Short-Circuit

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

Sum of $I^2dt$ = f (prospective Isc) at 1.05 Ue = 435 V




1 70-80 (GV3P80) - 62-73 (GV3P73)

2 48-65 A (GV3P65)

3 37-50 A (GV3P50)

4 30-40 A (GV3P40)

5 23-32 A (GV3P32)

6 17-25 A (GV3P25)

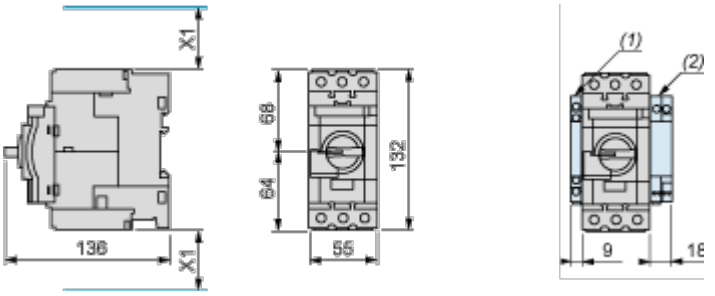
7 12-18 A (GV3P18)

8 9-13 A (GV3P13)

Dimensions Drawings

## GVI3L, GV3P

**Dimensions**



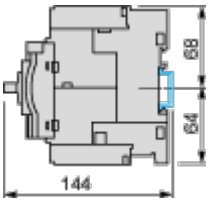

(1) Blocks GVAN••, GVAD•• and GVAM11.

(2) Blocks GV3AU•• and GV3AS••.

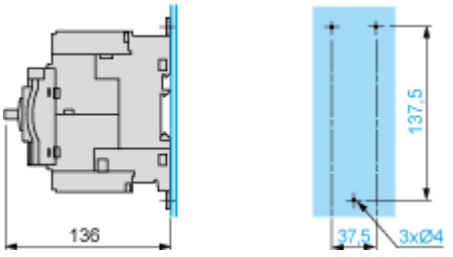
X1 = Electrical clearance (ISC max) 40 mm for Ue ≤ 500 V, 50 mm for Ue ≤ 690 V

**NOTE:** Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

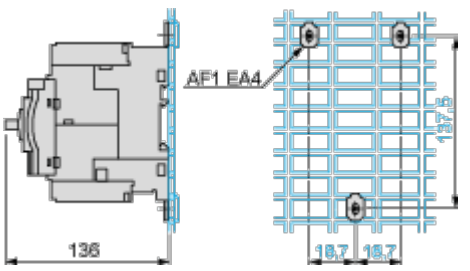
**Mounting on Rail AM1 DE200 or AM1 ED201**




**Panel Mounting, using M4 Screws**

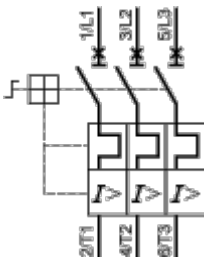



**Mounting on Pre-Slotted Plate AM1 PA**



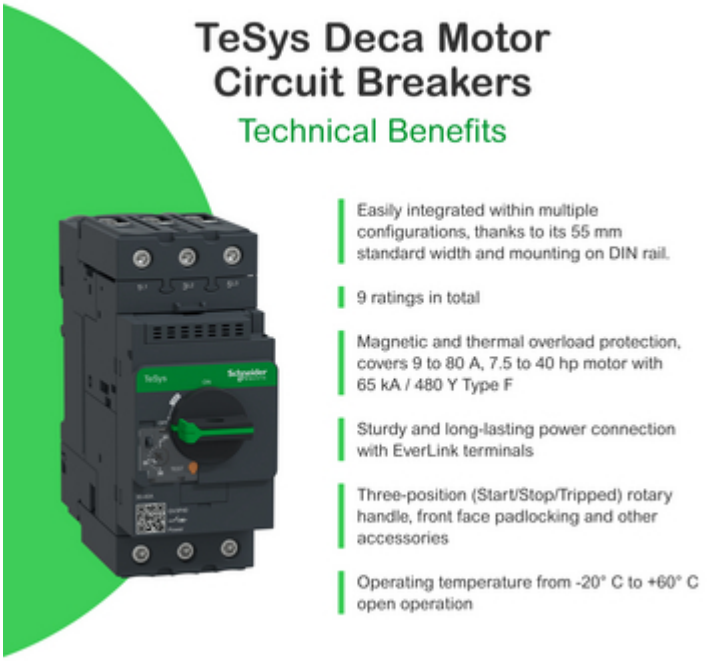
## Connections and Schema

**GV3P••**



Offer Marketing Illustration

**Product benefits / Features**



Offer Marketing Illustration

**Product benefits / Features**

Offer Marketing Illustration

**Product benefits / Features**

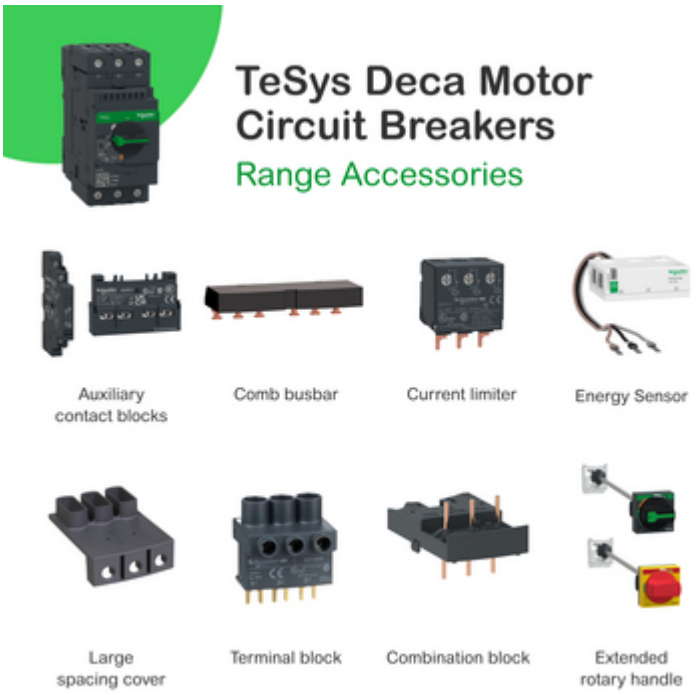
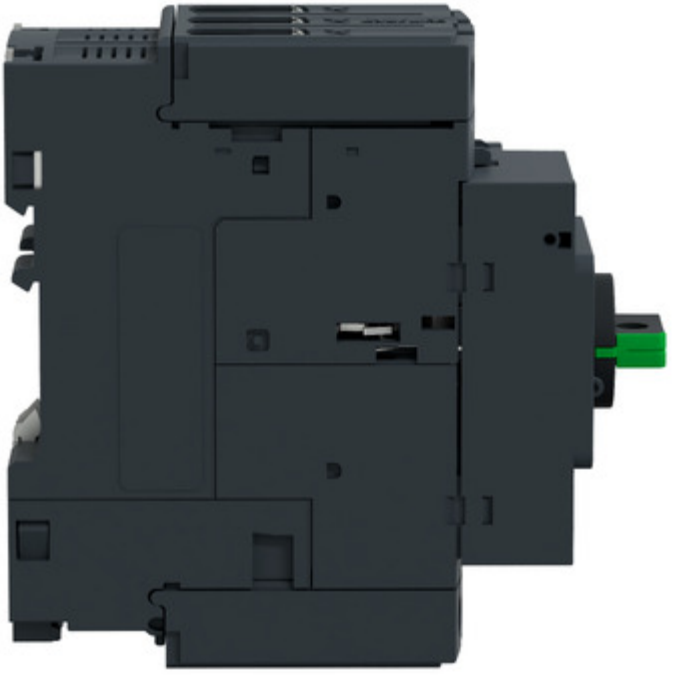
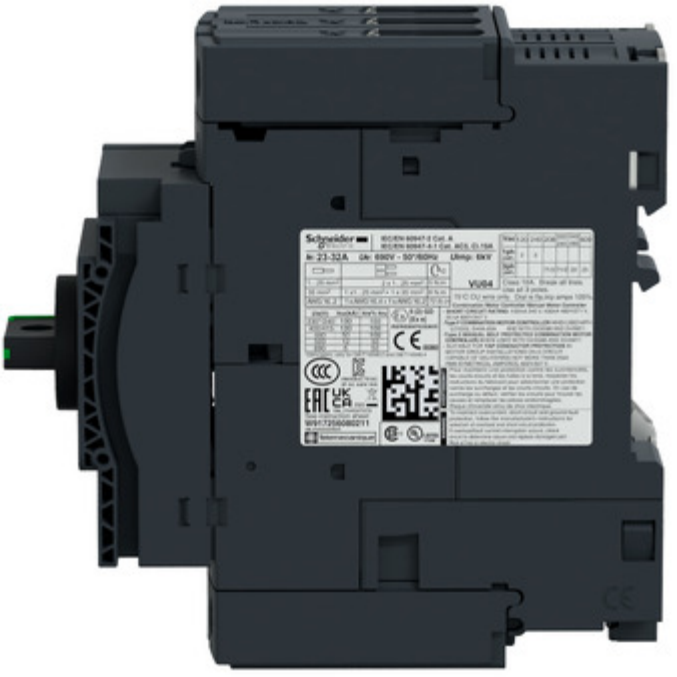


Image of product / Alternate images

**Alternative**






37.5
137.5
M4

Technical Illustration

**Assembly's dimensions**