

Product data sheet

Specifications



TeSys Deca Manual Starter and Protector, magnetic circuit protector, rotary handle, 50 A, EverLink BTR connectors

GV3L50

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys Deca
Product name	TeSys GV3
Product or Component Type	Motor circuit breaker
Device short name	GV3L
Device Application	Motor protection
Trip unit technology	Magnetic

Complementary

Poles description	3P
Network type	AC
Utilisation category	Category A IEC 60947-2 AC-3 IEC 60947-4-1
Network frequency	50/60 Hz IEC 60947-2
Motor power kW	22 kW 400/415 V AC 50/60 Hz 30 kW 500 V AC 50/60 Hz 45 kW 690 V AC 50/60 Hz
Breaking capacity	100 kA Icu 230/240 V AC 50/60 Hz 50 kA Icu 400/415 V AC 50/60 Hz 50 kA Icu 440 V AC 50/60 Hz 12 kA Icu 500 V AC 50/60 Hz 6 kA Icu 690 V AC 50/60 Hz
[Ics] rated service short-circuit breaking capacity	100 % 230/240 V AC 50/60 Hz 100 % 400/415 V AC 50/60 Hz 100 % 440 V AC 50/60 Hz 50 % 500 V AC 50/60 Hz 50 % 690 V AC 50/60 Hz
Control Type	Rotary handle
Line Rated Current	50 A
Magnetic tripping current	700 A
[Ith] conventional free air thermal current	50 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
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-2
Suitability for isolation	Yes IEC 60947-1
Power dissipation per pole	8 W

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

Mechanical durability	50000 cycles
Electrical durability	50000 cycles AC-3 415 V In
Tightening torque	44.3 lbf.in (5 N.m) screw clamp terminal
Fixing mode	35 mm symmetrical DIN rail clipped Panel screwed with 3 x M4 screws)
Mounting position	Horizontal Vertical
Width	2.2 in (55 mm)
Height	5.2 in (132 mm)
Depth	5.4 in (136 mm)
Product Weight	2.12 lb(US) (0.96 kg)
color	Dark grey

Environment

Standards	EN/IEC 60947-2 EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC/EN 60335-1:Clause 30.2 IEC/EN 60335-2-40:Annex JJ
Product Certifications	CCC UL CSA EAC LROS (Lloyds register of shipping) BV ABS DNV-GL UKCA
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 15 Gn for 11 ms contactor open Shocks 30 Gn for 11 ms contactor closed Vibrations 4 Gn, 5...300 Hz
Operating altitude	9842.52 ft (3000 m)

Ordering and shipping details

Category	US10I1122366
Discount Schedule	0I11
GTIN	3389119405454
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.56 in (6.500 cm)

Package 1 Width	6.30 in (16.000 cm)
Package 1 Length	5.71 in (14.500 cm)
Package weight(Lbs)	35.168 oz (997.000 g)
Unit Type of Package 2	P06
Number of Units in Package 2	60
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	23.62 in (60.000 cm)
Package 2 Length	31.50 in (80.000 cm)
Package 2 Weight	161.070 lb(US) (73.060 kg)

Contractual warranty

Warranty	18 months
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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	
Carbon footprint (kg CO2 eq, Total Life cycle)	30
Environmental Disclosure	Product Environmental Profile

Use Better

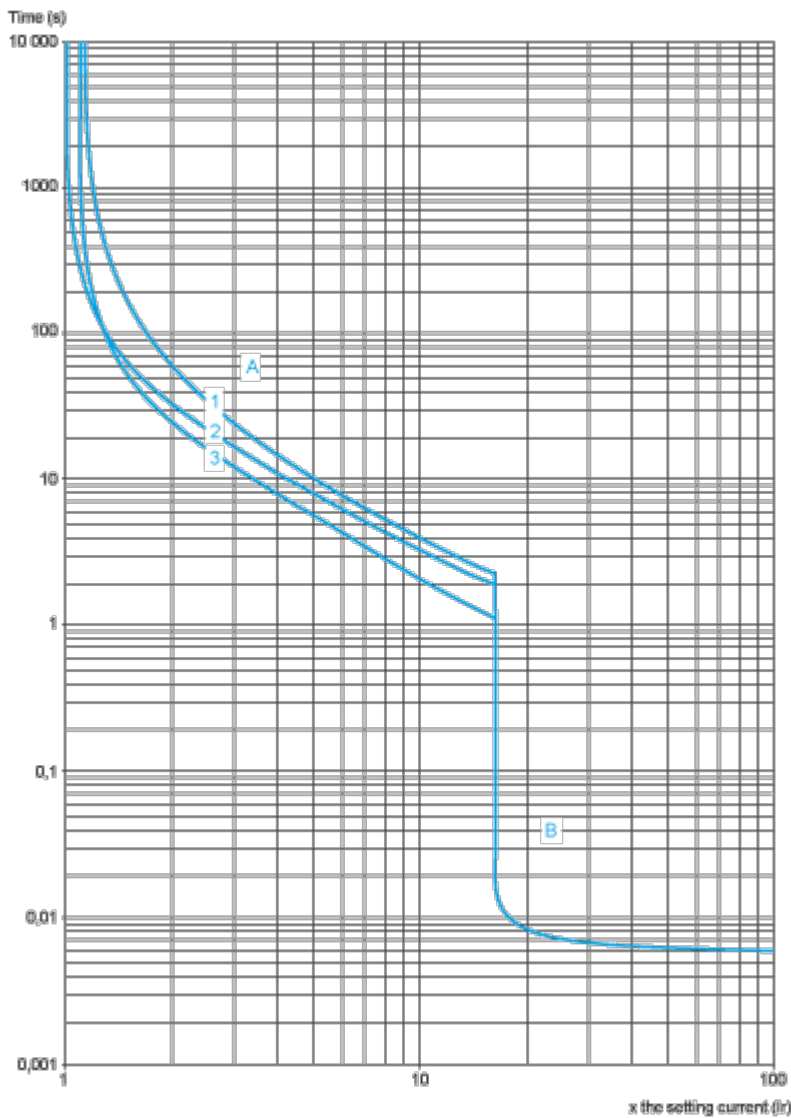
Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	2057c252-f956-4ac1-a3d9-75119bc8a000
REACH Regulation	REACH Declaration
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Use Again

Repack and remanufacture	
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

Tripping Curves for GV3L Combined with Thermal Overload Relay LRD33
Average Operating time at 20 °C without Prior Current Flow

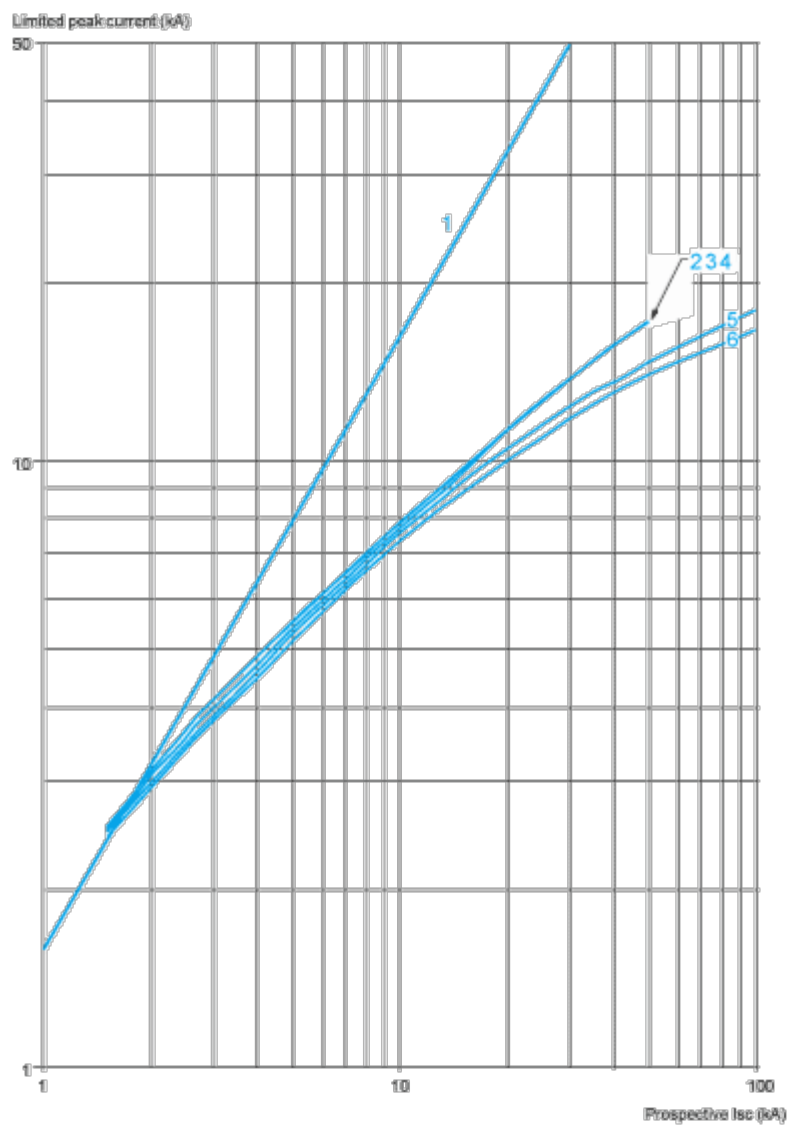


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state
- A Thermal overload relay protection zone
- B GV3L protection zone

Current Limitation on Short-Circuit for GV3L (3-Phase 400/415 V)

Dynamic Stress

I peak = f (prospective I_{sc}) at 1.05 U_e = 435 V

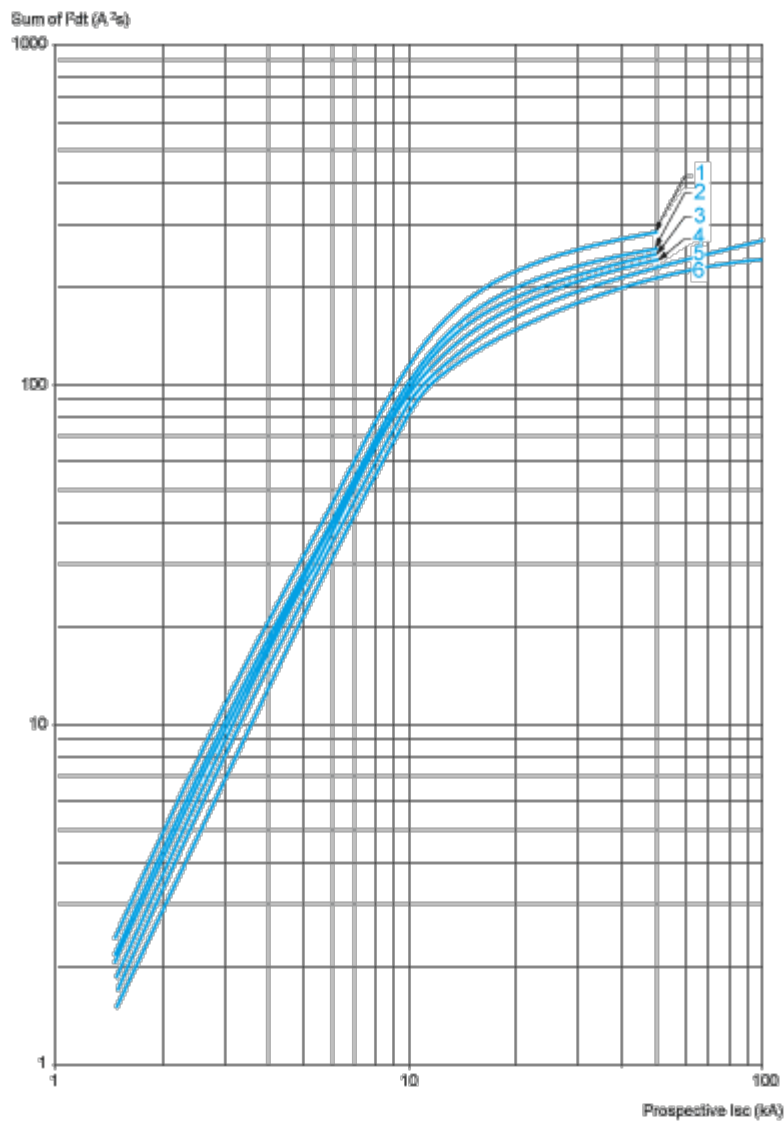


- 1 Maximum peak current
- 2 GV3L80 - GV3L73 - GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

Thermal Limit on Short-Circuit for GV3L

Thermal Limit in A²s

Sum of I²dt = f (prospective Isc) at 1.05 Ue = 435 V

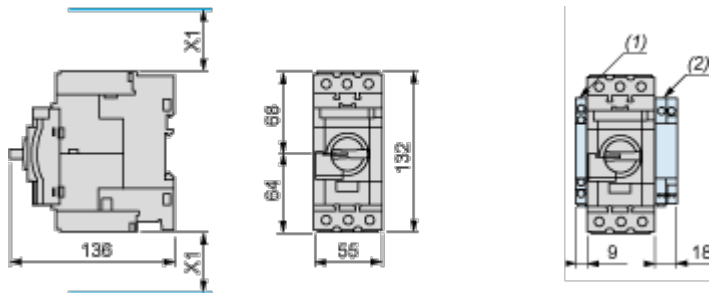


- 1 GV3L73 - GV3L80
- 2 GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

Dimensions Drawings

GV3L, GV3P

Dimensions

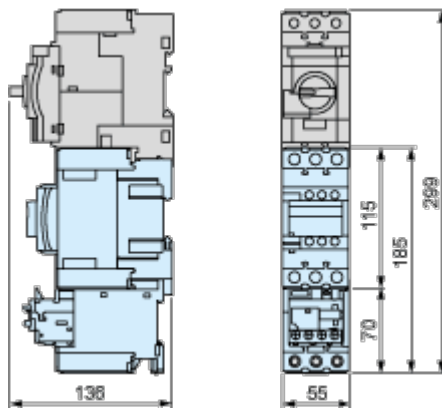


- (1) Blocks GVAN_{..}, GVAD_{..} and GVAM11.
- (2) Blocks GV3AU_{..} and GV3AS_{..}.

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

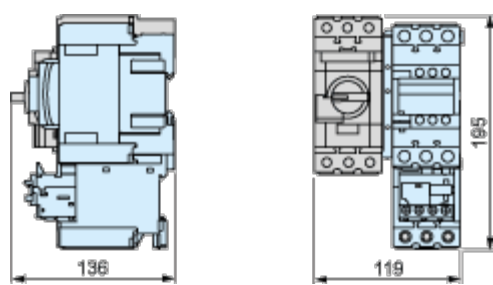
NOTE: Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

Mounting with Tesys contactor LC1D40A...D80A and relay LR3D313...380 ⁽¹⁾⁽²⁾⁽³⁾



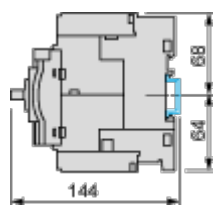
- (1) Mountings with c.b. up to GV3L73, GV3P73.
- (2) For GV3L80, GV3P80 use cable between components for dissipating heat. Consult online datasheets for values.
- (3) S-shape busbar system suitable up to 73 A.

Side by side mounting with Tesys contactor LC1D40A...D73A (S-shape busbar system GV3S⁽¹⁾)

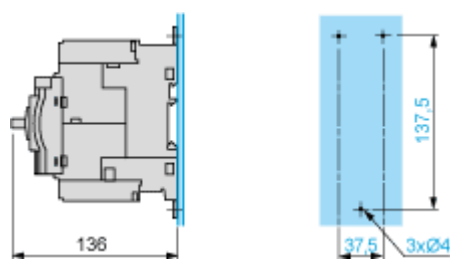


(1) Mountings with c.b. up to GV3L73, GV3P73.

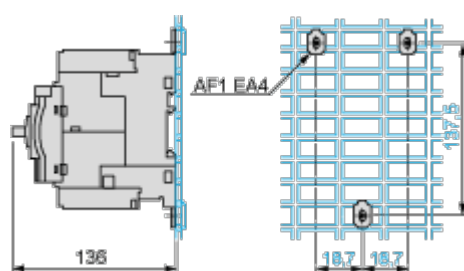
Mounting on Rail AM1 DE200 or AM1 ED201



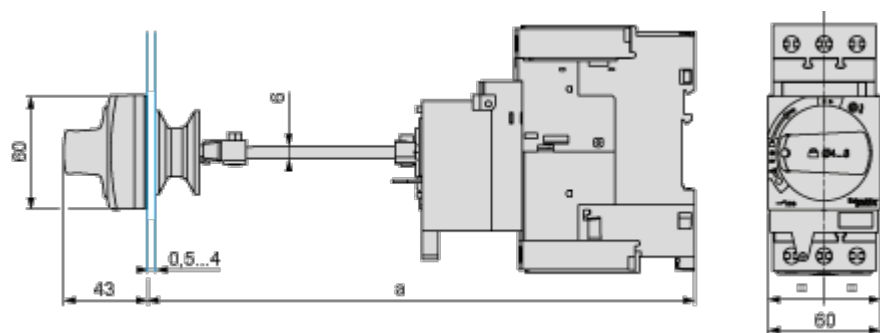
Panel Mounting, using M4 Screws



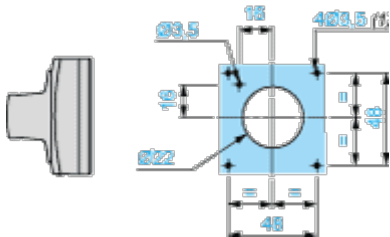
Mounting on Pre-Slotted Plate AM1 PA



Mounting of External Operator GV3APN01, GV3APN02 or GV3APN04 for Motor Circuit Breakers GV3L

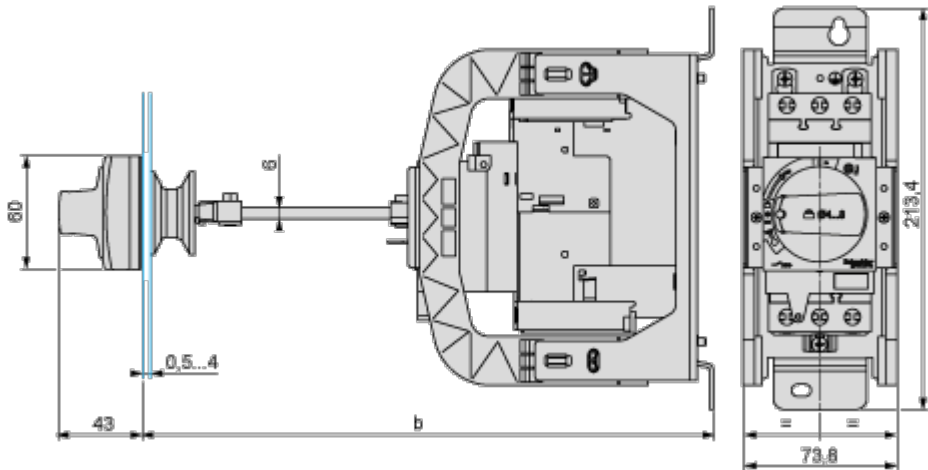


Door cut-out



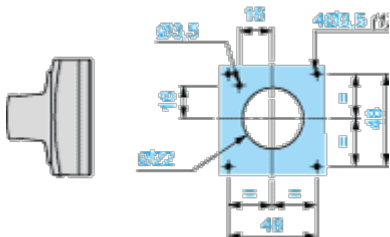
(1) For IP65 only.

Mounting of External Operator GVAPH03 for Motor Circuit Breakers GV3L



	b	
	Minimum	Maximum
GV3APN _{..} + GVAPH03	200	300
GV3APN _{..} + GVAPH03 + GVAPK12	300	492

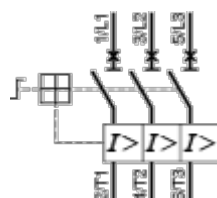
Door cut-out



(1) For IP65 only.

Connections and Schema

GV3L••



Offer Marketing Illustration

Product benefits / Features



TeSys Deca Motor Circuit Breakers

Range Accessories



Auxiliary
contact blocks



Comb busbar



Current limiter



Energy Sensor



Large
spacing cover



Terminal block



Combination block



Extended
rotary handle

Offer Marketing Illustration

Product benefits / Features

A black TeSys Deca Motor Circuit Breaker (GV3L50) is shown against a green circular background. The device has a green rotary handle and a green label with the Schneider logo. It is mounted on a DIN rail.

TeSys Deca Motor Circuit Breakers

Technical Benefits

- Easily integrated within multiple configurations, thanks to its 55 mm standard width and mounting on DIN rail.
- 9 ratings in total
- Magnetic and thermal overload protection, covers 9 to 80 A, 7.5 to 40 hp motor with 65 kA / 480 Y Type F
- Sturdy and long-lasting power connection with EverLink terminals
- Three-position (Start/Stop/Tripped) rotary handle, front face padlocking and other accessories
- Operating temperature from -20° C to +60° C open operation

Offer Marketing Illustration

Product benefits / Features

TeSys Deca

Motor Circuit Breakers



Operation and maintenance

Digital customer experience for technical documents and maintenance guide via EcoStruxure™ Facility Expert



Build and commissioning

Easier to install and operate with multi-standard screws, safe and long-lasting power connection with EverLink terminals.



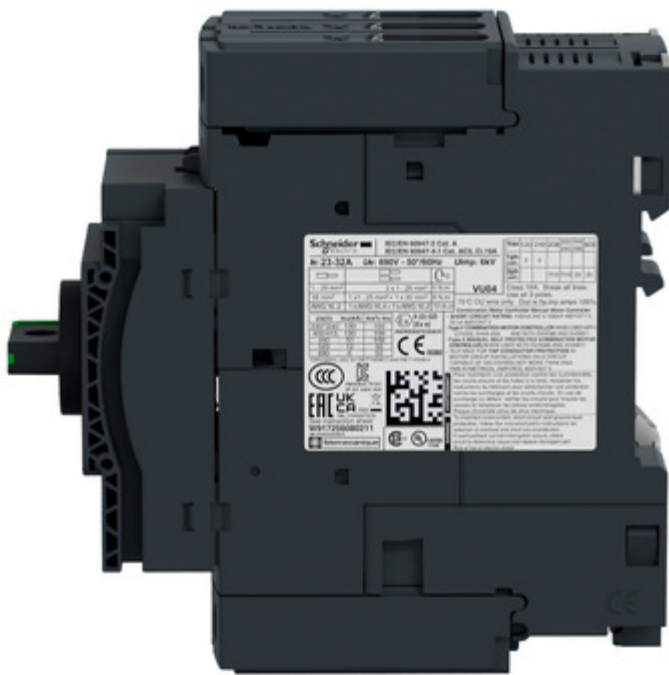
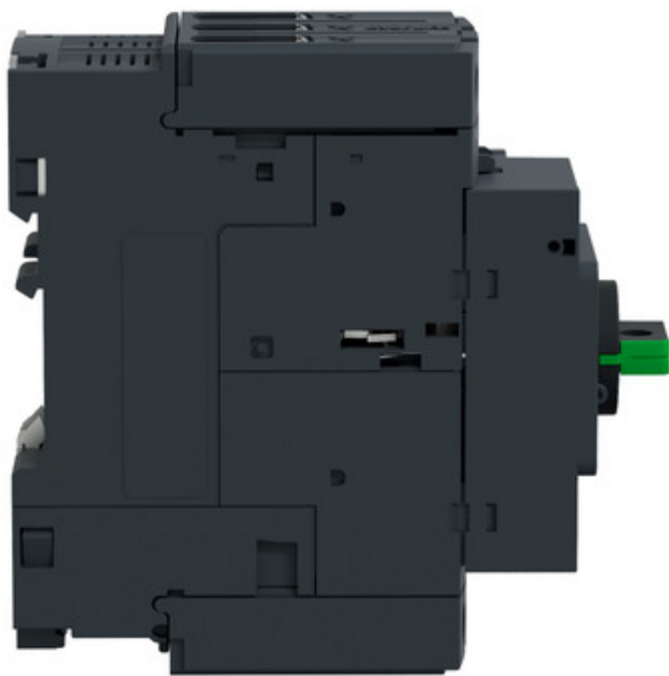
Universal Integration

Can be used for all type of applications across industry, infrastructure and buildings.



Image of product / Alternate images

Alternative





Technical Illustration

Assembly's dimensions

