

# 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.

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

## Environment

<b>Standards</b>	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
<b>Product Certifications</b>	CCC UL CSA EAC LROS (Lloyds register of shipping) BV ABS DNV-GL UKCA
<b>IP degree of protection</b>	IP20 IEC 60529
<b>Climatic withstand</b>	IACS E10
<b>Ambient Air Temperature for Storage</b>	-40...176 °F (-40...80 °C)
<b>Fire resistance</b>	1760 °F (960 °C) IEC 60695-2-11
<b>Ambient air temperature for operation</b>	-4...140 °F (-20...60 °C)
<b>Mechanical robustness</b>	Shocks 15 Gn for 11 ms contactor open Shocks 30 Gn for 11 ms contactor closed Vibrations 4 Gn, 5...300 Hz
<b>Operating altitude</b>	9842.52 ft (3000 m)

## Ordering and shipping details

<b>Category</b>	US10I1122366
<b>Discount Schedule</b>	0I11
<b>GTIN</b>	3389119405454
<b>Returnability</b>	Yes
<b>Country of origin</b>	FR

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	2.559 in (6.500 cm)

<b>Package 1 Width</b>	6.299 in (16.000 cm)
<b>Package 1 Length</b>	5.709 in (14.500 cm)
<b>Package weight(Lbs)</b>	35.168 oz (997.000 g)
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	60
<b>Package 2 Height</b>	29.528 in (75.000 cm)
<b>Package 2 Width</b>	23.622 in (60.000 cm)
<b>Package 2 Length</b>	31.496 in (80.000 cm)
<b>Package 2 Weight</b>	161.070 lb(US) (73.060 kg)

## Contractual warranty

<b>Warranty</b>	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
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## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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<a href="#">EU RoHS Directive</a>	Compliant with Exemptions
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SCIP Number	2057c252-f956-4ac1-a3d9-75119bc8a000
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REACH Regulation	<a href="#">REACH Declaration</a>
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California proposition 65	<b>WARNING:</b> 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
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## Use Again

### Repack and remanufacture

Circularity Profile	<a href="#">End of Life Information</a>
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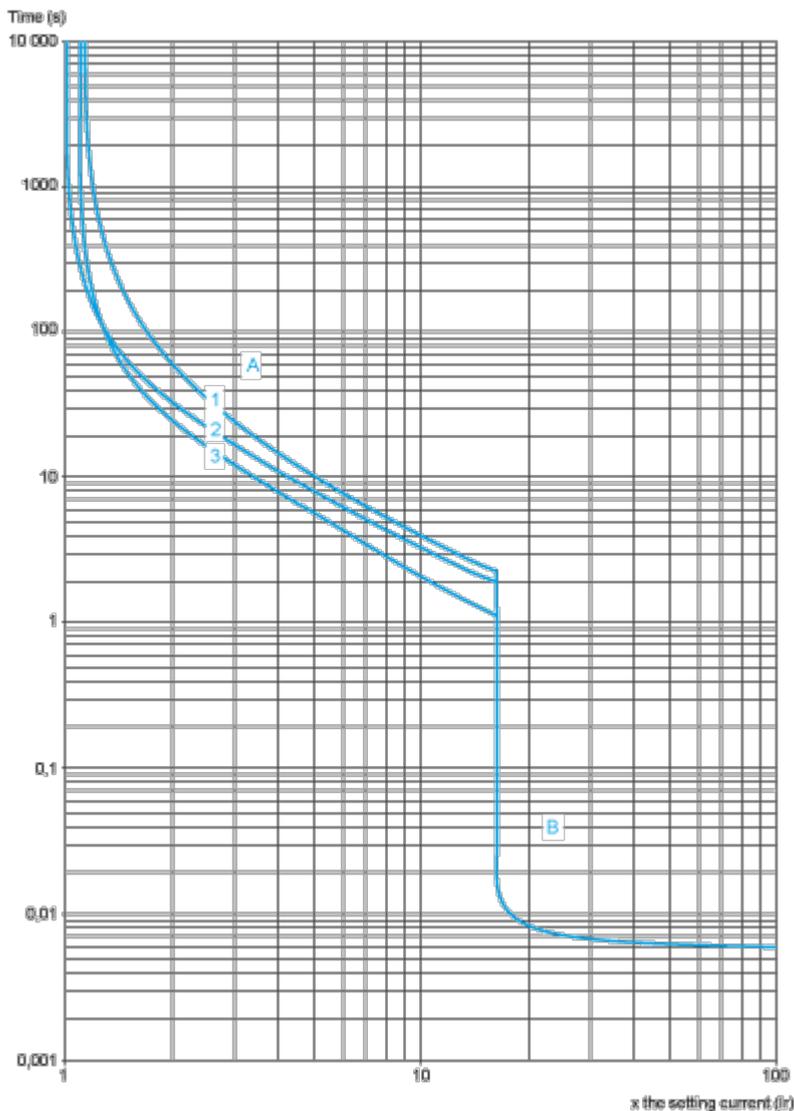
Take-back	No
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WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
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Performance Curves

Tripping Curves for GV3L Combined with Thermal Overload Relay LRD33

Average Operating time at 20 °C without Prior Current Flow

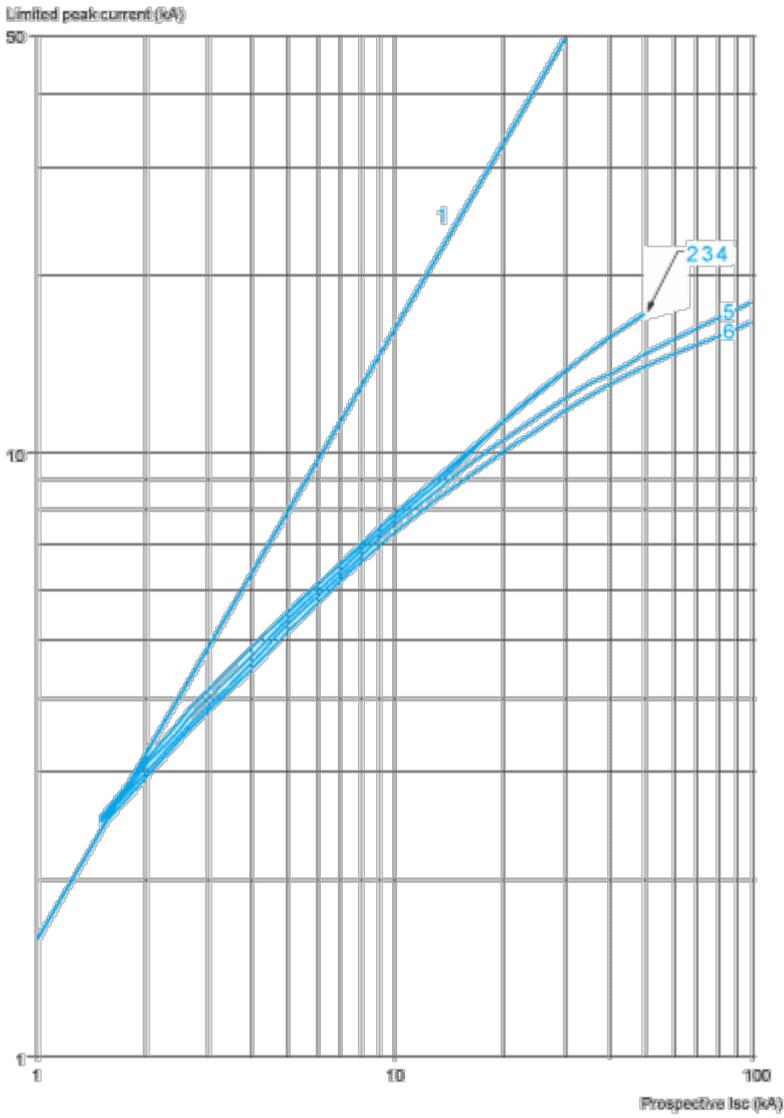


- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state
- A Thermal overload relay protection zone
- B GV3L protection zone

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

Dynamic Stress

I peak = f (prospective I<sub>sc</sub>) at 1.05 U<sub>e</sub> = 435 V

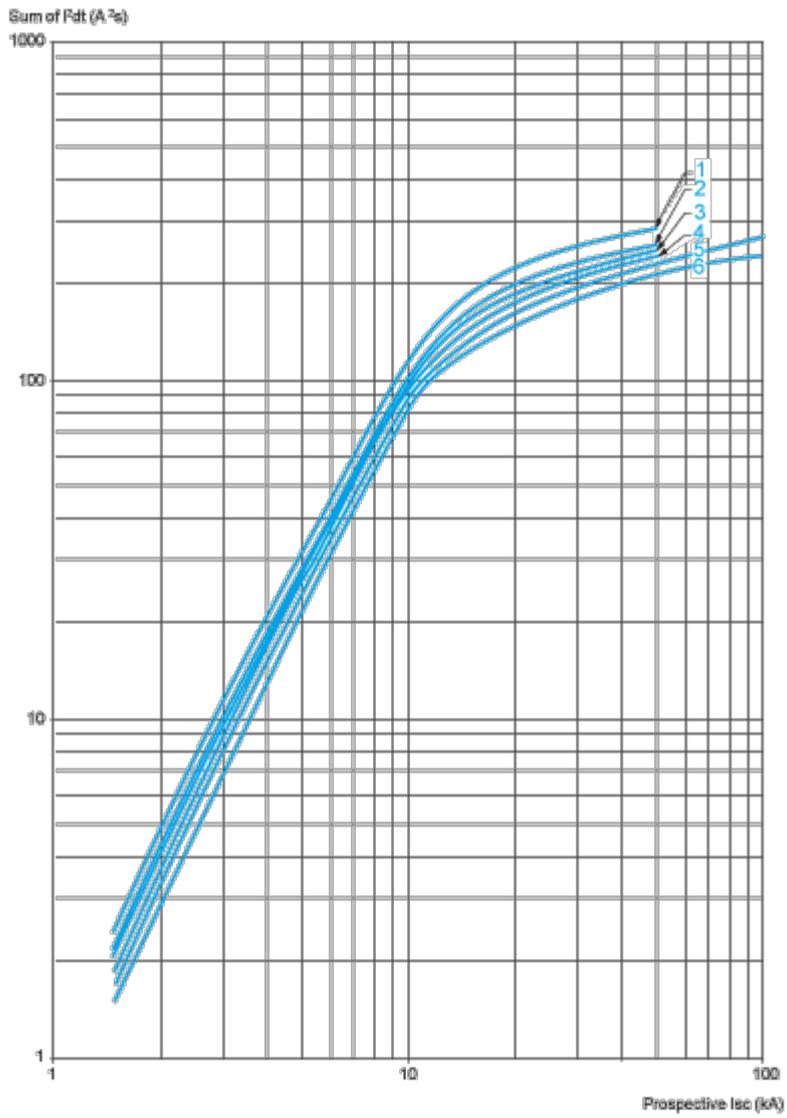


- 1 Maximum peak current
- 2 GV3L80 - GV3L73 - GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

**Thermal Limit on Short-Circuit for GV3L**

Thermal Limit in A<sup>2</sup>s

Sum of I<sup>2</sup>dt = f (prospective Isc) at 1.05 Ue = 435 V

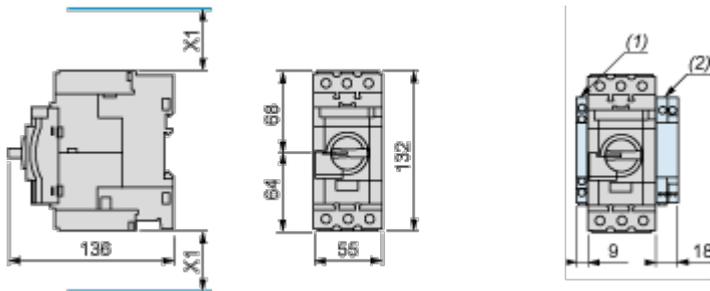


- 1 GV3L73 - GV3L80
- 2 GV3L65
- 3 GV3L50
- 4 GV3L40
- 5 GV3L32
- 6 GV3L25

Dimensions Drawings

GV3L, GV3P

Dimensions

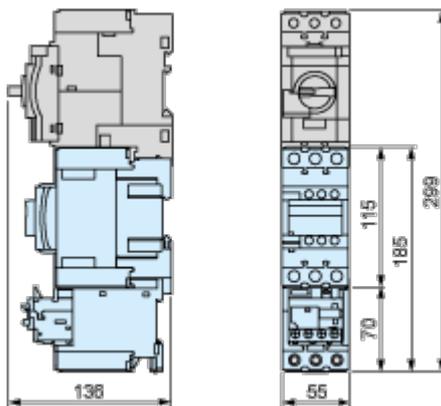


- (1) Blocks GVAN<sub>●●</sub>, GVAD<sub>●●</sub> and GVAM11.
- (2) Blocks GV3AU<sub>●●</sub> and GV3AS<sub>●●</sub>.

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

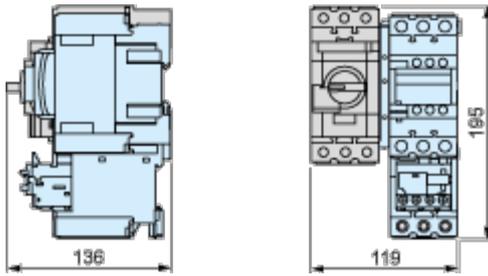
**NOTE:** Leave a space of 9 mm between 2 circuit breakers: either an empty space or side-mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

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



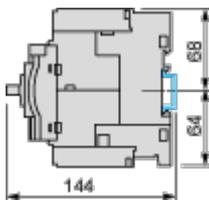
- (1) Mountings with c.b. up to GV3L73, GV3P73.
- (2) For GV3L80, GV3P80 use cable between components for dissipating heat. Consult online datasheets for values.
- (3) S-shape busbar system suitable up to 73 A.

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

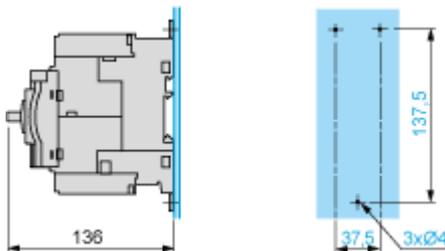


(1) Mountings with c.b. up to GV3L73, GV3P73.

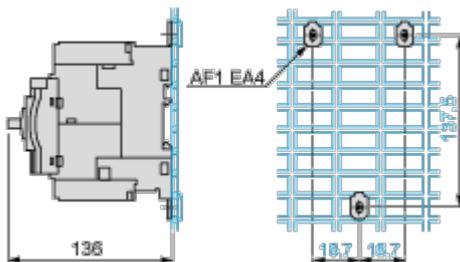
Mounting on Rail AM1 DE200 or AM1 ED201



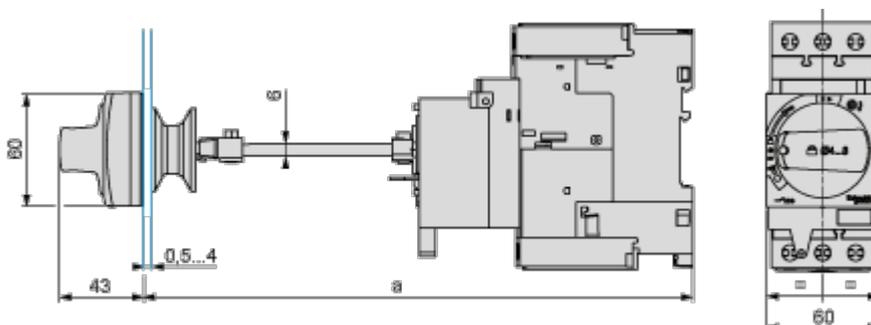
Panel Mounting, using M4 Screws



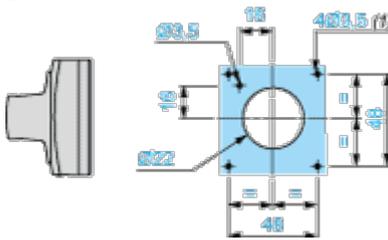
Mounting on Pre-Slotted Plate AM1 PA



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

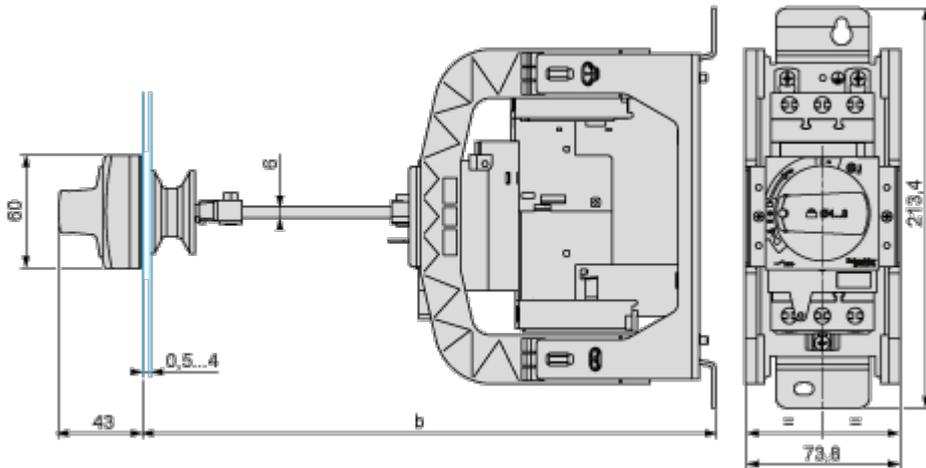


Door cut-out



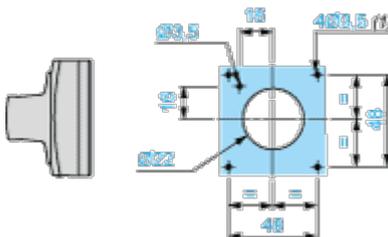
(1) For IP65 only.

Mounting of External Operator GVAPH03 for Motor Circuit Breakers GV3L



	b	
	Minimum	Maximum
GV3APN <sub>..</sub> + GVAPH03	200	300
GV3APN <sub>..</sub> + GVAPH03 + GVAPK12	300	492

Door cut-out

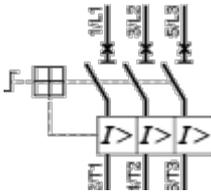


(1) For IP65 only.

Connections and Schema

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GV3L••



Offer Marketing Illustration

Product benefits / Features

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**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

The image displays a collection of accessories for TeSys Deca Motor Circuit Breakers. At the top left is a large black motor circuit breaker. Below it, eight different accessories are arranged in two rows of four. Each accessory is shown with a small image and a text label underneath. The accessories include auxiliary contact blocks, a comb busbar, a current limiter, an energy sensor, a large spacing cover, a terminal block, a combination block, and an extended rotary handle.

Offer Marketing Illustration

Product benefits / Features

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The image shows a TeSys Deca Motor Circuit Breaker, a black industrial device with a green rotary handle and a green label. It is mounted on a DIN rail. The device has three main terminals on top and three on the bottom. The label on the front face includes the Schneider logo and the text 'TeSys Deca'.

### 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

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## 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

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Technical Illustration

Assembly's dimensions

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