

Product data sheet

Specifications



Motor circuit breaker, TeSys GV4, 3P, 50A, Icu 100kA, thermal magnetic multifunction, UL489

GV4PB50S

Main

Range of product	TeSys GV4
Range	TeSys Deca
Device short name	GV4PB
Product name	TeSys GV4
Product or component type	Motor circuit breaker
Device application	Motor protection
Trip unit technology	Electronic Thermal-magnetic

Complementary

Poles description	3P
Utilisation category	Category A conforming to IEC 60947-2 AC-3 conforming to IEC 60947-4-1
Operating position	Any position
Breaking capacity	100 kA SCCR at 240 V AC 60 Hz conforming to UL 489 65 kA SCCR at 480Y/277 V AC 60 Hz conforming to UL 489 25 kA SCCR at 600Y/347 V AC 60 Hz conforming to UL 489 120 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 70 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 18 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
[Ics] rated service short-circuit breaking capacity	100 % at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 % at 525 V AC 50/60 Hz conforming to IEC 60947-2 25 % at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Control type	Toggle
[In] rated current	50 A
Magnetic tripping current	850 A
[Ue] rated operational voltage	690 V AC 50/60 Hz conforming to IEC 60947-2 600Y/347 V AC 60 Hz conforming to UL 489
[Ui] rated insulation voltage	800 V AC 50/60 Hz conforming to IEC 60947-2
[Ith] conventional free air thermal current	115 A conforming to IEC 60947-4-1
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-2
Power dissipation per pole	4.6 W
Mechanical durability	40000 cycles

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

Electrical durability	20000 cycles for AC-3 at 440 V In/2 10000 cycles for AC-3 at 440 V In
maximum operating rate	25 cyc/h
Rated duty	Continuous conforming to IEC 60947-4-1
Connections - terminals	EverLink BTR screw connectors (top) 1 cable(s) 1.5...70 mm² - rigid EverLink BTR screw connectors (top) 1 cable(s) 1.5...50 mm² - flexible EverLink BTR screw connectors (bottom) 1 cable(s) 2.5...95 mm² - rigid EverLink BTR screw connectors (bottom) 1 cable(s) 2.5...70 mm² - flexible
Tightening torque	9 N.m for cable 16...95 mm² 5 N.m for cable 1.5...10 mm²
Mechanical robustness	Vibrations: +/- 1 mm 2...13.2 Hz conforming to IEC 60068-2-6 Vibrations: 0.7 gn 13.2...100 Hz conforming to IEC 60068-2-6 Shocks: 15 gn 11 ms conforming to IEC 60068-2-27
Phase failure sensitivity	Yes conforming to IEC 60947-4-1
Height	171 mm
Width	81 mm
Depth	116 mm
Net weight	1.45 kg
Colour	Grey (RAL 7016)
Suitability for isolation	Yes conforming to IEC 60947-1

Environment

Standards	EN/IEC 60947-1 EN/IEC 60947-2 EN/IEC 60947-4-1 UL 489 CSA C22.2 No 5
Product certifications	IEC UL CSA
Climatic withstand	conforming to IACS E10
IK degree of protection	IK07 conforming to IEC 62262
Pollution degree	3
IP degree of protection	IP40 conforming to IEC 60529
Ambient air temperature for storage	-50...85 °C
Fire resistance	960 °C conforming to IEC 60695-2-11
Operating altitude	5000 m
Ambient air temperature for operation	-25...70 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	16.5 cm
Package 1 Width	11.0 cm
Package 1 Length	22.55 cm
Package 1 Weight	1.704 kg
Unit Type of Package 2	S03

Number of Units in Package 2	5
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	9.5 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	
Total lifecycle Carbon footprint	90
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	1b259a2c-3a3c-401a-acdd-f0837efd4018
REACH Regulation	REACH Declaration
Halogen-free status	Halogen free plastic parts product
PVC free	Yes

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

Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

A black TeSys Deca Motor Circuit Breaker with green terminal covers and a green handle. It is shown against a green circular background.

TeSys Deca Motor Circuit Breakers

Technical Benefits

- Combines a circuit breaker and overload relay in a single device.
- Gives great detection accuracy, as well as alarming and advanced protections for refs.
- Magnetic, electronic thermal-magnetic, or electronic thermal magnetic versions with advanced protection.
- Patented EverLink creep-compensating technology.
- Spring-based system ensures a long lasting connection.
- Electronic core for high-accuracy, wide settings, dual motor class 10/20.

Offer Marketing Illustration

Product benefits / Features

TeSys Deca

Motor Circuit Breakers

A black and green TeSys Deca Motor Circuit Breaker is shown against a green background. The device has a large handle in the center, a digital display on the right, and several terminals at the top and bottom.

Increase safety

Featuring EverLink technology, double rotary contact system, and Reflex tripping mechanism to ensure your operations run smoothly and securely.

Improve efficiency

With a compact design, hassle-free installation with one-click spring terminal accessories, while easy monitoring with visible auxiliaries.

Save time

Simple to specify, install and use for all applications and easy access to facilitate maintenance on site.