Product data sheet

Specifications



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

GV4PB50S

Main

Range	TeSys Deca
Range of product	TeSys GV4
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	5000 cycles for AC-3 at 415 V opening 5000 cycles for AC-3 at 415 V closing
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 (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	**90 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**11 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.5 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.4 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**74 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**4 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	**1b259a2c-3a3c-401a-acdd-f0837efd4018**
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: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**
Halogen-free status	**Halogen free plastic parts product**
PVC free	**Yes**

Use Again

Repack and remanufacture

Recyclability potential, in %	**49**
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**