Product data sheet
Characteristics

GV4PEM80N
Motor circuit breaker, TeSys GV4, 3P, 80A, Icu 50kA, thermal magnetic multifunction, Everlink terminals



Main

Range	TeSys Deca
Range of product	TeSys GV4
Device short name	GV4PEM
Product name	TeSys GV4
Product or component type	Motor circuit breaker
Device application	Motor protection
Trip unit technology	Thermal-magnetic Electronic

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
Motor power kW	37 KW at 400...415 V AC 50/60 Hz 45 KW at 500 V AC 50/60 Hz 22 KW at 400...415 V AC 50/60 Hz 30 KW at 500 V AC 50/60 Hz 37 KW at 660...690 V AC 50/60 Hz 45 KW at 660...690 V AC 50/60 Hz 55 KW at 660...690 V AC 50/60 Hz 30 KW at 400...415 V AC 50/60 Hz 37 KW at 500 V AC 50/60 Hz
Breaking capacity	100 KA Icu at 220...240 V AC 50/60 Hz conforming to IEC 60947-2 50 KA Icu at 380...415 V AC 50/60 Hz conforming to IEC 60947-2 50 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 15 KA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 65 KA at 208Y/120 V AC 50/60 Hz conforming to UL 60947 65 KA at 240 V AC 50/60 Hz conforming to UL 60947 35 KA at 480Y/277 V AC 50/60 Hz conforming to UL 60947 8 KA Icu at 660...690 V AC 50/60 Hz conforming to IEC 60947-2 25 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 18 KA at 600Y/347 V AC 50/60 Hz conforming to UL 60947
Control type	Toggle
[In] rated current	80 A
Magnetic tripping current	1360 A
[Ue] rated operational voltage	690 V AC 50/60 Hz conforming to IEC 60947-2
[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
Electrical durability	5000 Cycles for AC-3 at 415 V opening 5000 Cycles for AC-3 at 440 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 - solid 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 - solid 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	155 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	CSA C22.2 No 60947-4-1 UL 60947-4-1 EN/IEC 60947-4-1 EN/IEC 60947-2
Product certifications	IEC[RETURN]UL[RETURN]CSA[RETURN]CCC[RETURN]EAC[RETURN]ATEX[RETURN]EU-RO
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	17.0 Cm
Package 1 Width	11.0 Cm
Package 1 Length	22.0 Cm
Package 1 Weight	1.67 Kg
Unit Type of Package 2	S03
Number of Units in Package 2	5
Package 2 Height	30 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	9 Kg

Offer Sustainability

Recyclability potential, in %	49
Total lifecycle Carbon footprint	90 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	10.873320980286081
Carbon footprint of the manufacturing phase [A1 to A3]	11 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4598123984982335
Carbon footprint of the distribution phase [A4]	0.5 kg CO2 eq.

Carbon footprint of the installation phase [A5]	0.4097585395010464
Carbon footprint of the installation phase [A5]	0.4 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	74.322
Carbon footprint of the use phase [B2, B3, B4, B6]	74 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	3.7052338781741825
Carbon footprint of the end-of-life phase [C1 to C4]	4 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	90
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	1b259a2c-3a3c-401a-acdd-f0837efd4018
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
Halogen-free status	Halogen free plastic parts product
PVC free	Yes
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 a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised