

TeSys protection components

Motor circuit breakers

Environment				
Circuit breaker type			GV3L	GV3P
Conforming to standards			IEC/EN 60947-4-1 IEC/EN 60947-2	IEC/EN 60947-4-1 IEC/EN 60947-2 UL 60947-4-1 CSA C22.2 n° 60947-4-1
Product certifications			CCC, EAC, BV, LROS, DNV-GL, ABS	CCC, UL, CSA, EAC, ATEX, BV, LROS, DNV-GL, ABS
Climatic withstand			According to IACS E10	
Degree of protection (front face)	Conforming to IEC 60529	Open mounted In enclosure	Against direct finger contact: IP20	
			-	GV3 PC01 and GV3 PC02: IP55
Shock resistance	Conforming to IEC 60068-2-27		On: 15 gn-11 ms (On: 5 gn-11 ms for GV3L73, GV3L80, GV3P73, GV3P80) Off: 30 gn-11 ms	
Vibration resistance ⁽¹⁾	Conforming to IEC 60068-2-6		4 gn (5...300 Hz)	
Ambient air temperature	Storage		°C -40...+80	
	Operation	Open mounted In enclosure	°C -20...+60 ⁽²⁾	
Temperature compensation		Open mounted In enclosure	°C - -20...+40	
			°C - -20...+60	
Flame resistance	Conforming to IEC 60695-2-11		°C - -20...+40	
Maximum operating altitude			°C 960	
Suitable for isolation	Conforming to IEC 60947-1 § 7-1-6		m 3000	
Resistance to mechanical impact			J Yes -	
			J - 10 IK09 (in enclosure)	
Sensitivity to phase failure			Yes, conforming to IEC 60947-4-1 § 8-2-1-5-2 for GV3P	
Technical characteristics				
Circuit breaker type			GV3L	GV3P
Utilisation category	Conforming to IEC 60947-2		A	-
	Conforming to IEC 60947-4-1		-	AC-3
Rated operational voltage (Ue)	Conforming to IEC 60947-2	V	690	
Rated insulation voltage (Ui)	Conforming to IEC 60947-2	V	690	
Rated voltage	Conforming to UL 60947-4-1, CSA C 22.2 n° 60947-4-1	V		600
Rated operational frequency	Conforming to IEC 60947-4-1 UL, CSA	Hz	50/60	
Rated impulse withstand voltage (U imp)	Conforming to IEC 60947-2	kV	6	
Total power dissipated per pole		W	8	
Mechanical durability (C.O.: Close, Open)		C.O.	50 000	
Electrical durability for AC-3 duty	415 V In	C.O.	50 000 (20 000 for GV3L73, GV3P73, GV3L80, GV3P80)	
Duty class (maximum operating rate)		C.O./h	25	
Maximum conventional rated thermal current (Ith)	Conforming to IEC 60947-4-1	A	-	13 to 80
Rated duty	Conforming to IEC 60947-4-1			Continuous duty
Operating threshold of magnetic trips			14 I max	

⁽¹⁾ In case of vibration above 3 gn on contactor with electronic coil (TeSys D Green) and direct mounting with LRD relay, it is recommended to mount the devices separately by screws on metal plate.

⁽²⁾ 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.