

**4000 EMC specifications - immunity :**

Port	Phenomenon	Test standard	IEC 61326-1		NAMUR NE21 : 2007		PR standard specifications	
			Test value	Criterion	Test value	Criterion	Test value	Criterion
Enclosure	ESD input terminals	IEC 61000-4-2	4 kV Contact	B	6 kV Contact	B	6 kV Contact	B
	ESD	IEC 61000-4-2	4 kV / 8 kV Contact / Air	B	6 kV / 8 kV Contact / Air	A	6 kV / 8 kV Contact / Air	A 1%
	EM-field	IEC 61000-4-3	10 V/m, 80...1000 MHz 3 V/m, 1.4...2 GHz 1 V/m, 2...2.7 GHz	A	10 V/m, 80...2000 MHz 3 V/m, 2...2.7 GHz	A	10 V/m, 80...1000 MHz 10 V/m, 1.4...2 GHz 1 V/m, 2...2.7 GHz	A 0.5%
	Magnetic field	IEC 61000-4-8	30 A/m	A	100 A/m	A	30 A/m	A 0.5%
DC power	Burst	IEC 61000-4-4	2 kV	B	2 kV	A	2 kV	A 1.0%
	Surge	IEC 61000-4-5	1 kV / 2 kV, Diff. / Comm. 0 Ω/10 Ω	B	0.5 kV / 1 kV, Diff. / Comm. 0 Ω/10 Ω	A	1 kV / 2 kV, Diff. / Comm. 0 Ω / 10 Ω	A 1.0%
	Conducted RF	IEC 61000-4-6	3 V, 150 kHz...80 MHz	A	10 V, 10 kHz...80 MHz Covers RF + LF	A	10 V, 150 kHz...100 MHz	A 0.5%
	Interruptions	IEC 61000-4-29 (IEC 61000-4-11; for 4222 only)	60% for 10 ms 100% for 20 ms	B	100% for 20 ms	B	60% for 10 ms 100% for 20 ms	B
	Conducted 50 Hz	IEC 61000-4-8	Not required		Not required		50 Hz, 300 Ω, 230 V	A 1%
	Conducted LF	IEC 61000-4-16	Not required		Not required		15 Hz...150 kHz, 10 V 50 Hz, 300 Ω, 230 V	A 0.5%
I/O signal	Burst	IEC 61000-4-4	2 kV 1 kV (for 4222 only)	B	1 kV	A	1 kV	A 1.0%
	Surge input	IEC 61000-4-5	1 kV / 2 kV, Diff. / Comm. 40 Ω	B	0.5 kV / 1 kV, Diff. / Comm. 40 Ω	B	1 kV / 2 kV Diff. / Comm. 40 Ω	B
	Surge output	IEC 61000-4-5	1 kV / 2 kV, Diff. / Comm. 40 Ω	B	0.5 kV / 1 kV, Diff. / Comm. 40 Ω	B	1 kV / 2 kV Diff. / Comm. 40 Ω	A 1.0%
	Conducted RF	IEC 61000-4-6	3 V (150 kHz...80 MHz)	A	10 V, 10 kHz...80 kHz	A	10 V 150 kHz...100 MHz	A 0.5%
	Conducted 50 Hz	IEC 61000-4-8	Not required		Not required		50 Hz, 300 Ω, 230 V	A 1%
	Conducted LF	IEC 61000-4-16	Not required		Not required		15 Hz...150 kHz, 10 V 50 Hz, 300 Ω, 230 V	A 0.5%

- A: During testing, normal performance within the specification limits.
- B: During testing, temporary degradation, or loss of function or performance which is self recovering.
- C: During testing, temporary degradation, or loss of function or performance which requires operator intervention or system reset occurs.

**4000 EMC specifications - emission:**

Class B equipment		Standard CISPR 22	
Disturbance	Test method	Frequency range	Limits
Radiated	Quasi-peak	30 to 230 MHz	30 dB (μV/m)
		230 to 1000 MHz	37 dB (μV/m)
Conducted	Quasi-peak	0.15...0.50 MHz	40 to 30 dB (μA)
	Average		30 to 20 dB (μA)
	Quasi-peak	0.50 to 30 MHz	30 dB (μA)
	Average		20 dB (μA)