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Type Tests Required for Zero Packet Loss™

Flyer

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IEC 61850-3 EMI Immunity Type Tests			
Test	Description		Test levels
IEC 61000-4-2	ESD	Enclosure contact	± 6 kV
		Enclosure air	± 8 kV
IEC 61000-4-3	Radiated RFI	Enclosure ports	10 V/m
IEC 61000-4-4	Burst (fast transient)	Signal ports	± 4 kV at 2.5 kHz
		D.C. power ports	± 4 kV
		A.C. power ports	± 4 kV
		Earth ground ports	± 4 kV
IEC 61000-4-5	Surge	Signal ports	Line-to-line
		D.C. power ports	± 2 kV line-to-earth, ± 1 kV
		A.C. power ports	± 4 kV line-to-earth, ± 2 kV
IEC 61000-4-6	Induced (conducted) RFI	Signal ports	10 V
		D.C. power ports	10 V
		A.C. power ports	10 V
		Earth ground ports	10 V
IEC 61000-4-8	Magnetic field	Enclosure ports	40 A/m continuous, 1000 A/m
IEC 61000-4-29	Voltage dips & interrupts	D.C. power ports	30% for 0.1 s, 60% for 0.1 s
IEC 61000-4-11		A.C. power ports	30% for 1 period, 60% for 50 periods & 100% for 50 periods
IEC 61000-4-12	Dumped oscillatory	Signal ports	2.5 kV common, 1 kV
		D.C. power ports	2.5 kV common, 1 kV
		A.C. power ports	2.5 kV common, 1 kV
IEC 61000-4-16	Mains frequency voltage	Signal ports	30 V Continuous, 300 V for 1 s
		D.C. power ports	30 V Continuous, 300 V for 1 s
IEC 61000-4-17	Ripple on D.C. power supply	D.C. power ports	10%

IEEE 1613 EMI Immunity Type Tests			
Test	Description		Test levels
IEEE C37.90.3	ESD	Enclosure contact	± 8 kV
		Enclosure air	± 15 kV
IEEE C37.90.2	Radiated RFI	Enclosure ports	35 V/m
IEEE C37.90.1	Fast transiant	Signal ports	± 4 kV at 2.5 kHz
		D.C. power ports	± 4 kV
		A.C. power ports	± 4 kV
		Earth ground ports	± 4 kV
IEEE C37.90.1	Oscillatory	Signal ports	2.5 kV Common Mode at 1 MHz
		D.C. power ports	2.5 kV Common & Differential Mode at 1 MHz
		A.C. power ports	2.5 kV Common & Differential Mode at 1 MHz

Security information

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

For more information about industrial security, please visit:
http://www.siemens.com/industrialsecurity

The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

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