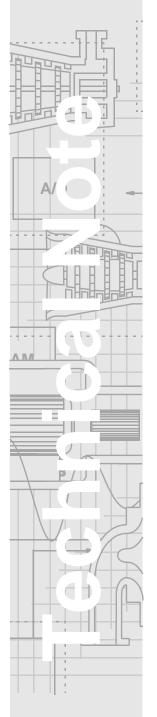


Agency Certifications for the *Guardian*[®]OSP System



This document identifies the current agency certifications for the Guardian overspeed protection system (OSP) and related components. Guardian OSP systems have been determined to be compliant with the following hazardous area, environmental, and EMC standards.

	Hazardous Area US: Class I, Division 2, Groups A,B,C,D and T4A Canada: Class I, Zone 2, Group IIC and T4A European: ATEX II, 3, G, EEx, nACL, IIC and T4	
Compliant Standard	Certification Level	
ANSI/UL 508	Electric Industrial Control Equipment	
ANSI/UL 698	Industrial Control Equipment for Use in Hazardous (Classified)	
ANSI/UL 1203	Explosion-Proof and Dust-Ignition - Proof Electrical Equip- ment for Use in Hazardous (Classified) Locations	
UL 1604	Electrical Equipment for Use in Class I and II, Div. 2, Class III Hazardous Locations	
CSA 22.2 No. 0-M	General Requirements - Canadian Electrical Code, Part II	
CSA 22.2 No. 0-M NFPA 70 (1996)	National Fire Protection Association – National Electrical Code (NEC)	
CSA 22.2 No. 0.4-M	Bonding and Grounding of Electrical Equipment (Protective Grounding)	
CSA 22.2 No. 25 -1966	Enclosures for Use in Class II Groups E, F and G Hazard- ous Locations	
CSA 22.2 No. 30-M 1986	Explosion – Proof Enclosures for Use in Class I Hazardous Locations	
CSA22.2 No. 94-1986	Special Purpose Enclosures 2,3,4 and 5	
CSA 22.2 No.142-M 1990	Process Control Equipment Industrial Products - General Requirements	
CSA 22.2No.157-92	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations	
CSA 22.2 No. 213 - M 1987	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations	
BS EN 50021 (2000) (Directive 94/9/EC)	Electrical apparatus for potentially explosive atmospheres - Type of protection "n"	

IEC.	Environmental Industrial Process Measurement and Control
Compliant Standard	Certification Level
IEC 60654-1 (1993)	Operating Conditions for Industrial Process Measurement and Control Equipment,
(IEC 654, Part 1)	Part 1: Temperature, Humidity, and Barometric Pressure
IEC 60654-2 (1997)	Operating Conditions for Industrial Process Measurement and Control Equipment,
(IEC 654, Part 2)	Part 2: Power
IEC 60654-3 (1983)	Operating Conditions for Industrial Process Measurement and Control Equipment,
(IEC 654, Part 3)	Part 3: Mechanical Influences
IEC 60664-3 (2003)	Insulation Coordination for Equipment Within Low-Voltage Systems, Part 3: Use of
(IEC 654, Part 3)	Coatings to Achieve Insulation Coordination of Printed Board Assemblies
MIL STD 810E	Environmental Test Methods and Engineering Guidelines – Transportation Vibra-
Method 514.4.1	tion and Shock

CE	Electromagnetic Capability (EMC) European Union: 73/23/EEC Low Voltage Directive and 89/336/EEC Electromagnetic Compatibility Directive	
Compliant Standard	Certification Level	
IEC 61000-6-2 (2005) (EN 50082-2)	Electromagnetic Compatibility (EMC), Part 2 General Standards - Immunity for Industrial Environments	
IEC 61000-4-2 (1995)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Tech- niques Section 2: Electrostatic Discharge Immunity Tests	
IEC 61000-4-3 (1998) (ENV 50140 (1993)	Electromagnetic Compatibility (EMC), Part 4-3: Testing and Measurement Tech- niques - Radiated, Radio-Frequency, Electromagnetic Field Immunity Test	
IEC 61000-4-4 (2000)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Tech- niques Section 4: Electrical Fast Transient/Burst Immunity Test	
IEC 61000-4-5 (2000) (ENV 50141 1993)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Tech- niques Section 5: Surge Immunity Test	
IEC 61000-4-6 (2000)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Tech- niques Section 6: Immunity to conducted disturbances, induced by radio- frequency fields	
IEC 61000-4-8 (2000)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Tech- niques Section 8: Power frequency magnetic field immunity test	
IEC 61000-4-11 (1994)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Tech- niques Section 11: Voltage dips, short interruptions, and voltage variations immunity tests	
EN 50081-2 (1994)	Electromagnetic Compatibility – Generic Emission Standard Part 2: Industrial Environmental	
CISPR 11 (2004) (BS EN 55011)	Industrial, scientific and medical (ISM) radio-frequency equipment emissions – Electromagnetic disturbance characteristics – Limits and methods of measurement	

C ERE	Regional Certifications for Guardian Controllers
Compliant Standard	Description
Pattern Approval (Metrology) Certification (2014)	The order of testing and approvement of the types of patterns of measuring instruments is approved by the decision of Gosstantart of the Russian Foundation. It establishes the general requirements to the organization work on tests and the approvement of measuring instruments types. This order of testing and approvement is applied to the measurement patterns, including the measuring systems (complexes), which are used in the sphere of distribution of the state metrological control and supervision.
Declaration of Conformity (CU TR) (2014)	The Declaration of Conformity of the Customs Union Technical Requirements (CU TR) confirms the safety requirements and elec- tromagnetic compatibility and allows exporters and producers to spread their goods on the territory of the Customs Union. NOTE: "CT RU" is replacing both "Declaration of Conformity (GOST)" and "Permit to Use from Rostekhnadzor" moving forward.

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