





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 Equipment 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 Hazardous 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”

Technical Note

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

	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 Techniques Section 2: Electrostatic Discharge Immunity Tests
IEC 61000-4-3 (1998) (ENV 50140 (1993))	Electromagnetic Compatibility (EMC), Part 4-3: Testing and Measurement Techniques - Radiated, Radio-Frequency, Electromagnetic Field Immunity Test
IEC 61000-4-4 (2000)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Techniques Section 4: Electrical Fast Transient/Burst Immunity Test
IEC 61000-4-5 (2000) (ENV 50141 1993)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Techniques Section 5: Surge Immunity Test
IEC 61000-4-6 (2000)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Techniques Section 6: Immunity to conducted disturbances, induced by radio-frequency fields
IEC 61000-4-8 (2000)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Techniques Section 8: Power frequency magnetic field immunity test
IEC 61000-4-11 (1994)	Electromagnetic Compatibility (EMC), Part 4: Testing and Measurement Techniques 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

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	<p>Regional Certifications for Guardian Controllers</p>
<p>Compliant Standard</p>	<p>Description</p>
<p>Pattern Approval (Metrology) Certification (2014)</p>	<p><i>The order of testing and approval of the types of patterns of measuring instruments is approved by the decision of Gosstandart of the Russian Federation. It establishes the general requirements to the organization work on tests and the approval of measuring instruments types. This order of testing and approval 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.</i></p>
<p>Declaration of Conformity (CU TR) (2014)</p>	<p><i>The Declaration of Conformity of the Customs Union Technical Requirements (CU TR) confirms the safety requirements and electromagnetic 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.</i></p>

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