

## Agency Certifications for Series 5M Controllers



This document identifies the current agency certifications for CCC's Series 5M controllers and related components. Series 5M controllers have been determined to be compliant with the following EMC standards.

| CE                               | Electromagnetic Capability (EMC) EMC Directive: 2004/108/EC Low Voltage Directive: 2006/95/EC  |  |
|----------------------------------|--|--|
| Compliant Standard               | Certification Level  |  |
| IEC 61010-1 (2010)               | Safety Requirements for Electrical Equipment for Measurement Control and Labratory Use, Part 1: General Requirements.  |  |
| IEC 61000-6-2 (2005)             | Electromagnetic Compatibility (EMC), Part 2 General Standards - Immunity for Industrial Environments   |  |
| IEC 61000-3-2 (2005)             | Electromagnetic Compatibility (EMC), Part3-2 Limits - Limits for harmonic current emissions (equipment input current ≤ 10 A per phase)                               |  |
| 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)             | 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)             | 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 61000-4-11 (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<br>Standard Part 2: Industrial Environmental  |  |
| CISPR 11 (2004)<br>(BS EN 55011) | Industrial, scientific and medical (ISM) radio-frequency equipment emissions – Electromagnetic disturbance characteristics – Limits and methods of measurement       |  |

TN44 (1.1) November 2014

| <b>EAC</b>  | Regional Certifications for S5M 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 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.  |

The TTC and impeller logos, Air Miser, Guardian, Prodigy, Recycle Trip, Reliant, Safety On, SureLink, TTC, Total Train Control, TrainTools, TrainView, TrainWare, Vanguard, Vantage, Vibrant, and WOIS are registered trademarks; and the Series 3<sup>++</sup> and Series 5 logos, COMMAND, and TrainPanel are trademarks of Compressor Controls Corp. © 2013-2014