FA Systems Division Mitsubishi Electric Corporation

Our Compliance with North American safety certifications

Introduction

In the United States, OSHA (Occupational Safety and Health Administration) is responsible for safety certification of factory equipment, and NRTL (Nationally Recognized Testing Laboratory) approved by OSHA certifies the safety of electrical and electronic products. For this reason, we have obtained NRTL certification for our products sold in the United States. And for the same reason, we have obtained CSA certification for the products sold in Canada. NRTL certification and CSA certification are required in each state and municipality of the United States and Canada.

This is an overview of the North American safety certifications and a summary of the current status of compliance for our FA products.

1. Overview of North American Safety Certifications

In the United States and Canada, standard product certification systems are established by state and municipal law. NRTL product safety certification in the United States and CSA (Canadian Standards Association) in Canada are standard product certification systems.

The NRTL program currently recognizes 21 certification and testing laboratories including UL and TÜV Rheinland (hereinafter called "TÜV"), and we have obtained either of them.

In addition, the UL and TÜV are officially recognized as equivalents and direct replacements of the CSA marks. Therefore, you can obtain CSA certification by obtaining certifications of UL or TÜV. However, because requirements in Canada are not necessarily consistent with those in the Unites States, certification marks are



differentiated from those in the Unites States by, for example, adding C to the mark.

2. Products subject to North American Safety Certifications and our situation

Table 1 shows our compliance with North American certifications for our FA products. Products that meet the requirement of North American certifications display certification marks.

Table 1: Status of obtaining NRTL certification for our FA products

Products	Status	Products	Status
Magnet Switches	0	Inverters	0
Magnet Contactors	0	Sensorless Servos	0
Thermal Relays	0	AC Servo Amplifiers	0
Magnetic Relays	0	AC Servo Motors	0
Auxiliary Contact Units	0	Motion Controllers	0
Manual Motor Starters	☆	Reducer for servo motor	☆
Alarm Contact Units	0	Powder Clutches	☆
Solid State Contactors	0	Tension Detector	☆
Uninterruptible Power Supply (UPS)	0	Tension Controllers	☆
Earth Leakage Relays	0	Programmable Controllers	0
Low-voltage Circuit Breakers (incl. Earth Leakage Circuit breakers)	0	Industrial PCs (MELIPC)	0
Electronic Multi-Measuring Instruments	☆	Human Machine Interfaces GOT	0
Energy Measuring Units	0	CNCs	0
Energy-saving Data Collection Servers	0	Industrial Robots	☆
Three-phase Induction Motors	Δ	EDMs	☆
Vector Motors	Δ	Laser Processing Machines	☆
IPM Motors	☆	Laser Displacement Sensor	☆
Geared Motors	Δ	Vision Sensor	0
Code Readers	0		

Please refer to individual catalogues for certification status of other related equipment.

O: Some products have obtained NRTL/CSA standard certification. Refer to the page of each model for the details.

 $[\]Delta$: Some products have obtained NRTL certification. Refer to the page of each model for the details.

^{☆:} No model obtained North American safety certifications.