Our compliance with EAC certification systems

Introduction

When distributing and selling in EAEU (Eurasian Economic Union) member states (Russian, Belarus, Kazakhstan, Armenia and the Kyrgyzstan), certain products are required to comply with EAC (Eurasian Conformity) system which is a unified system in the EAEU. This is an overview of EAC system and a summary of the current status of compliance for our FA products.

1. Overview of EAC

EAC is a system intended for free circulation of products, consumer protection, and safety assurance in EAEU, and only products that comply with technical regulations required for each product are allowed to display EAC marking on them. EAC marking is a mandatory conformity mark for designated products placed on the market (introduced and sold) and looks like the right figure. Products with EAC marking are allowed to be sold and distributed freely in the market of EAEU.

Our FA products are required to comply with the following four technical regulations: Low Voltage Equipment, EMC, Safety of Machinery, and RoHS. Products subject to EAC marking cannot be distributed and sold in the EAEU market unless they meet the required technical regulations and display EAC marking.

2. Description of each technical regulation

This is a summary of the four technical regulations required for our FA products.

(1) EMC (Electro Magnetic Compatibility) of Technical Devices

Similar to European EMC directive, this regulation requires that the electromagnetic disturbance generated from a product does not interfere with the intended operation of other equipment, and that the product has an immunity against electromagnetic disturbance expected during the intended use of the product without causing unacceptable degradation.

(2) Safety of Low Voltage Equipment

Similar to European Low Voltage directive, This regulation requires that equipment designed for use with a voltage rating of between 50 and 1000 V for alternating current (A.C.) and between 75 and 1500 V for direct current (D.C.) guarantee protection against hazards arising from the electrical equipment as well as hazards possibly caused by external factors on the electrical equipment.

(3) Safety of machinery and Equipment

Similar to European Machinery directive, this regulation requires safety with control systems to avoid dangers in the event of hardware or software failure, structural safety such as guarding the operating parts, and safety during maintenance work, etc.

(4) RoHS (Restriction of Hazardous Substances)

Similar to European RoHS directive, this regulation specify the maximum concentration limits on the use of certain hazardous substances*1 and products must have less than or equal the maximum concentration value.

^{*1)} Certain Hazardous Substances: The RoHS requirement specify the limits on the use of a total of 6 substances of mercury, lead, cadmium, hexavalent chromium, PBBs and PBDEs.

3. Products subject to EAC marking and our situation

Table 1 shows our compliance with EAC marking for our FA products. Products that meet the EAC certification system display EAC marking.

Table 1: Status of complying with EAC certification system for our FA products

Table 1: Status of complying with EAC	l certification s	Low Safety of		
Products	EMC	voltage	machinery	RoHS
Magnet Switches	_	O	—	_
Magnet Contactors	_	0	_	_
Thermal Relays	_	0	_	_
Magnetic Relays	_	0	_	_
Auxiliary Contact Units	_	_	_	_
Manual Motor Starters	_	☆	_	_
Alarm Contact Units	_	_	_	_
Solid State Contactors	☆	☆	_	_
Uninterruptible Power Supply (UPS)	☆	☆	_	_
Earth Leakage Relays	0	0	_	0
Low-Voltage Circuit Breakers				_
(incl. Earth Leakage Circuit breakers)	0	0	_	0
Electronic Multi-Measuring Instruments	☆	☆	_	_
Energy Measuring Units	☆	☆	_	_
Energy-saving Data Collection Servers	☆	☆	_	_
Three-phase Induction Motors	_	0	_	_
Vector Motors	_	☆	_	_
IPM Motors	☆	☆	_	_
Geared Motors	_	0	_	_
Inverters	0	0	_	_
Sensorless Servos	0	0	_	
AC Servo Amplifiers	0	0	_	_
AC Servo Motors	0	0	_	_
Motion Controllers	0	0	_	_
Powder Clutches	_	_	_	_
Tension Controllers	☆	☆	_	_
Programmable Controllers	0	0		_
Industrial PC s (MELIPC)	0	0	_	Δ
Human Machine Interfaces GOT	0	0	_	_
CNCs	0	0	_	_
Industrial Robots	☆	☆	_	_
EDMs	☆	☆	☆	_
Laser Processing Machines	☆	☆	☆	_
Laser Displacement Sensor	☆	_	_	_
Vision Sensor	☆	_	_	_
Code Readers	☆	_	_	_

<u>Please refer to individual catalogues for compliance status of other related equipment.</u>

 $[\]bigcirc$: Products subject to technical regulations and some models have been certified.

 $[\]triangle$: Products partially subject to technical regulations and some models have been certified.

^{☆:} Products subject to technical regulations but there is no compliant product.

^{—:} Products not subject to technical regulations.