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FA Systems Division
Mitsubishi Electric Corporation

Our Compliance with CE Marking

Introduction

When distributing and selling in European market (including Iceland, Norway, Liechtenstein, and Turkey in addition to EU member states), certain products require CE marking[*1] which is a unified regulation in the EU. This is an overview of CE marking and a summary of the current status of compliance for our FA products.

1. Overview of CE marking

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

CE marking

For our FA products, the following six Directives are required: Low Voltage Directive, EMC Directive, Machinery Directive, RoHS Directive, Radio Equipment Directive, and Energy-related Products Directive. Products subject to CE marking cannot be distributed and sold in European market unless they comply with the applicable directives and display CE marking.

2. Description of each directive

This is a summary of the six directives required for our FA products.

(1) EMC (Electro Magnetic Compatibility) Directive

This directive 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) LVD (Low Voltage Directive)

This directive 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) MD (Machinery Directive)

This directive applies to products with moving parts, and products intended to be incorporated into other machinery are also included. It 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) Directive

This directive specifies the maximum concentration limits on the use of certain hazardous substances[*2] in electronics and electric equipment. Products sold in Europe must have less than or equal the maximum concentration value.

(5) RED (Radio Equipment Directive)

This directive requires that products that intentionally emit and/or receive radio waves for the purpose of radio communication and/or radio determination[*3] need to comply with the safety requirements defined by LVD and satisfy adequate level of electromagnetic compatibility regulated by EMC directive. To avoid harmful interference of radio wave, efficient use of frequency bands is also required.

(6) ErP (Energy related Products) Directive

This directive establishes a framework for the setting of eco-design requirements applicable to energy-related products and requires a particular environmental aspect of the energy-related products calculated for a given unit of output performance such as energy consumption during use.

*1) CE: Conformite Europeenne (French)

*2) Certain Hazardous Substances: The RoHS Directive specify the limits on the use of a total of 10 substances including 6 substances of mercury, lead, cadmium, hexavalent chromium, PBBs and PBDEs, in addition to 4 phthalates.

*3) Radio determination: the determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to those parameters, by means of the propagation properties of radio waves

3. Products subject to CE marking and our situation

Table 1 shows our compliance with CE marking for our FA products. Products that meet the CE marking requirement display CE marking.

Table 1: Status of complying with CE marking for our FA products

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

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

○: Products subject to Directive and is conform to the Directive. Refer to the page of each model for the details.

△: Products partially subject to Directive and is conform to the Directive. Refer to the page of each model for the details.

☆: Products subject to Directive but there is no compliant product.

—: Products not subject to Directive.

*The status is marked as “Products not subject to Directive” since Declaration of conformity to Low Voltage Directive is restricted by Machinery Directive, however the safety requirements of Low Voltage Directive are required to be conformed within Machinery Directive, the requirements are satisfied.